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TERMS,

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Address M. B. BATEHAM or H. COLMAN, Rochester

METEOROLOGICAL OBSERVATIONS,

MADE AT THE ROCHESTER COLLEGIATE INSTITUTE BY L. WETHERELL, NOVEMBER, 1842.

Date.	*Thermometer.* Sunrise.	1 o'clock, P. M.	1 h. af. sunset.	Mean.	*Winds.* A. M.	P. M.	*Weather.* A. M.	P. M.	Rain Gage
26	34	51	42	42.83	w	w	fair	su'w	
27	37	44	37	38.16	s w	n	rain	fair	.06
28	30	52	45	44.5	s w	s	fair	fair	
29	43	54	45	47.5	s w	e	fair	fair	
30	44	50	42	44.	e	e	cl'dy	fair	
31	36	59	56	51.5	s w	s w	fair	fair	
1	43	57	46	48.83	s w	n e	fair	cl'dy	
2	44	48	40	42.	n e	n e	cl'dy	fair	
3	32	44	37	36.83	n e	n e	fair	fair	
4	27	46	35	36.83	n w	n w	fair	fair	
5	32	56	43	46.	s	s	fair	fair	
6	46	64	50	53 66	s w	n w	fair	cl'dy	
7	48	48	46	46 33	n e	e	cl'dy	cl'dy	
8	42	43	44	43.33	n e	n e	rain	rain	
9	44	44	33	38	w	w	rain	su'w	1.6
10	39	40	38	37.16	w	w	cl'dy	fa rs	
11	37	45	36	39 5	n w	n w	cl'dy	fair	.69
12	38	43	41	40.85	s e	s w	cl'dy	rain	.12
12	39	43	37	39.	w	n w	rain	cl'dy	.04
14	35	39	40	37.5	s	s w	rain	rain	
15	32	43	33	35.83	w	w	fair	fair	.15
16	31	38	33	35.83	s	s e	sn'w	cl'dy	
17	36	41	42	38.66	s	s e	cl'dy	rain	
18	30	28	21	25 33	w	w	cl'dy	cl'dy	.29
19	24	32	28	28.	w	w	fair	fair	
20	24	32	28	28.	w	s w	fair	fair	
21	24	31	26	26.66	w	w	cl'dy	cl'dy	
22	22	32	30	29.33	w	s w	cl'dy	cl'dy	
23	30	40	37	35 83	s e	s w	cl'dy	cl'dy	
24	31	35	28	29.66	s w	w	sn'w	fair	
25	21	35	31	29.16	s w	s w	cl'dy	cl'dy	

Range of Thermometre for the month, 43 deg.

The fall of rain for the month of Oct. 2.20 inch.

Mean Temperature of " 1842, 48,34 deg.

" " " 1841, 44,46 "

" " " 1840, 47,23 "

Remarks on the Weather from October 26th to November 25th.

Oct. 26th, slight showers this afternoon; 28th, frost this morning; 29th, Indian summer commences —continues to the end of the month.

Nov. 3d, severe frost this morning—wild geese seen; 6th, Indian summer continues—it has been very fine for several days; 8th, commenced raining last evening about 11 o'clock and continued rainy through the day; 9th, rainy this morning; snow this afternoon, first this autumn; cleared off at sunset; 10th, commenced raining about noon; 18th, pleasant and warm early in the evening—Ther. 46; rain, wind, snow and frost during the night; 19th, snow storm last night, with high wind; 20th, high wind, with snow squalls; 24th, snow last night. The week ending Nov. 24th, has been very cold and windy—much colder than the corresponding week of last year. The navigation on the Erie canal has closed during this week.

Winter seems to have commenced quite early; Nov. 22d,—at the rising of the moon this evening between 8 and 9 o'clock, there appeared a cone of 15 degrees in length, as I judged, above it, of remarkable brightness.

October, and the first week of November, have been remarkably fine this season.

The mean temperature of the first half of Nov. 41.41 deg. Last half of Oct. 45.55 deg.

Monroe County--Notice.

The annual meeting of the Monroe County Agricultural Society will be held at the Arcade House, Rochester, on Wednesday, the 4th of January, at 11 o'clock, A. M., when the premiums will be awarded on Roots, Grain and Field Crops, and officers will be elected for the ensuing year.

Competitors for premiums on crops are requested to be particular in making out their statements and certificates—as required by the law of the state—(see the Sept. No. of the current vol. of the Farmer,) and it is very desirable that the claims and certificates be handed to the President or Secretary as early as the 1st of January.

For the New Genesee Farmer.

Intellectual Culture.

This is the title of an article in your September number, which I have read with deep interest.—"Flora" treats her subject in the right manner, and in a way calculated to do good. We feel assured that when the ladies take hold of a matter it is in the right hands, and must move onward. I hope I shall not be considered as an intruder if I offer a few considerations on the same subject.

The improvement of the intellectual powers enlarges the mind by giving it a greater variety of ideas, and subjects for the exercise of thought. It increases our pleasures by giving new sources of knowledge, and a better understanding of the operations of nature. He who possesses a cultivated mind is subject to a thousand sweet influences when he looks upon the face of nature. A mine of beauty seems opened to his eyes. The broad and arching expanse of the sky, with its sun by day, and gemmed with countless stars by night—the trees with their lofty and akyward reaching trunks, and green and arching foliage—the glad murmur of the stream, and the eternal and solemn roar of the mighty ocean; all speak a language full of meaning and instruction to his soul.

Intellectual culture is a preventive to vice. Will he be a vicious man who sees the impress of a God on every page of the great volume of nature—and while every thing around him speaks of his wisdom, of his power, and of his boundless benevolence? What a lesson of charity does every gentle shower, which "falleth alike on the evil and on the good," teach him and every one? And the refreshing dew which "knoweth not the domains of sect or party," speaks aloud of universal benevolence of the "great Impartial."

These and many other reasons might be offered as inducements to intellectual culture. I hope "Flora" will not dismiss the subject yet, but give us another "good turn." R. T. Y.

The Maples, Oct., 1842.

From the Mark Lane Express.

Seed Wheat.

Mr. Lungley read a report at the meeting of the Witham Agricultural Society, of a trial which he had made as to the comparative merits of *best* wheat and *tail* wheat for seed:—

"The following is the test of two samples of wheat here produced, one acre each was drilled the 18th of Oct, 1841:—

	Qrs.	Bu.	Pk.
One acre of the best wheat produced	4	4	1¾
Weight per bushel, 64 lbs.			
Produce from 1 acre of tail seed wheat	4	3	3
Weight per bushel, 64 lbs.			
Difference,	0	0	2¾

The straw was all weighed, and there were not 20 lbs. difference in the weight.

The best wheat was drilled 10 pecks per acre.

The inferior. 7 "

Very little difference was observed from its coming up to harvest. By close inspection the tail wheat appeared to have rather a narrower blade and somewhat thicker plant; a stranger could not tell the difference by walking across the field."

The tail wheat, some of which Mr. Lungley produced, was a very poor, thin grain, yet there was no perceptible difference in the quality of the produce. The subjoined letter will not only furnish an example of the benefit which may be anticipated from scientific men directing their attention to agriculture, but may also throw some additional light upon Mr, Lungley's experiment.

What is Beautiful?

Oh, tell me what is beautiful? Is it a flower—a bird—
Is it the wind's soft murmure on a summer eve that's heard?
Is it the violet's lowliness—the rose's blushing hue—
Is it all springtide's beauties fresh opening on our view?
Is it the running brook? The sparkling fountain—
Or sunbeam resting on some snowclad mountain?

Is it the evening shadows as they fade at set of sun?
Is it the golden brightness of the day when just begun?
Is it the silver moon-beam into some wood-nook stealing,
And all its unsunned beauties unto the night revealing?
Is it an infant's smiling slumbers?
Is its song's bewitching numbers?

All this is beautiful—the early dawn—
The birds—the flowers that bloom upon the lawn—
The rosy set of sun—the woodland nook—
All, all is beautiful in Nature's book.
But there is one beauty that reigns on high—
'Tis the smile in a lovely woman's eye! G.

[*Eng. paper.*

Silk Culture.

The following communication we acknowledge with pleasure. Men are always willing to boast of their success, but few men are brave enough to tell of their mistakes and failures, which are often more useful and important to be known than their successful results.

In some respects we cannot agree with Mr. Cook. A prepared, finished and furnished cocoonery, well adapted to ventilation and warming at pleasure, is undoubtedly to be preferred; but within our knowledge good silk and an abundant product have been obtained in feeding in vacant barns and granaries. We recommend a well built cocoonery, believing that the cultivator will be in the end fully compensated for the expense and outlay; but at the same time we would not have poor and small cultivators prevented or discouraged in their operations, because they have not the means of at once erecting a well finished cocoonery. In Mansfield, Ct., where silk has been successfully raised for seventy years, such provision is scarcely known. That the time of feeding may by the best arrangements be reduced from six weeks to little more than three weeks is a very material consideration to recommend the best fixtures; and as by the improved French method, attention day and night, in order to the most rapid completion of the work. The disease, to which Mr. Cook refers, is a formidable obstacle in the culture of silk. We cannot say from his account of it, that it is the disease known in Europe as the *muscadine* and which it has been said confidently, may be cured by a sprinkling of caustic lime upon the worms; but we know that a friend of ours, whose worms were diseased this season and died in great numbers, applied lime as directed without any perceptible benefit. We need much more information than we have in the case before we can pronounce on the character of, or the remedy for the disease. That the worm may be injured by feeding from the leaves of the multicaulis of one year's growth is not improbable, as we have heard from a very intelligent silk grower the same opinion strongly expressed.

In respect to the destruction of the Chrysales we would recommend Miss Rapp's method of stifling them in a box with camphor; though we know those, who do it by steam in preference to all other modes without the inconvenience or ill effects which Mr. Cook describes. They are careful however in the case not to allow the current of steam to be poured directly upon the cocoons; but the cocoons receive it as it becomes gradually diffused through the box or vessel in which they are placed.

With respect to the insect, which Mr. Cook describes as perforating the cocoons and materially injuring their value, we know at present of no certain preventative. This is not a frequent accident. An excellent silk grower of long experience however advises that when the cocoons are put away Scotch Snuff or tobacco should be put among them, as is done among woolen cloths in summer, to keep off the insects. This he thinks would prove an effectual security. It is a curious fact that there seems to be no animal, except the human, filthy enough to relish or rather not to be absolutely offended with this detestable weed; and which in the vile habits of chewing and smoking with their peculiar accompaniments renders its devotees in most cases a perfect nuisance to decent people.

We fully agree with Mr. Cook in the opinion that the silk culture can never succeed without pains-taking and care and labor. Nothing good in life can ever be accomplished without these; and with these the silk culture is almost sure to return an ample compensation for all the labor and expense incured.—Ed.

PERRY FARM, SODUS P. O.
October 14, 1842.

HENRY COLMAN, Dear Sir:—Your letter, asking an account of my operations and success in the culture of silk, was received several weeks since. A multiplicity of engagements, both at home and abroad, must be my apology for the delay in answering it.

I have been *experimenting* in a "small way" in the culture of silk, about five or six years, preparatory to larger operations, which I hope to make next year; and the value of this communication, (if worth anything,) must depend upon the profits of experience in mistakes, errors, bad management, and misfortunes, more than upon the history of any very splendid or successful results. I have not made in any one season more than about five bushels of cocoons; and the present, only enough to supply seed for another year, as I have been finishing off and plastering my cocoonery.

First, then, as to mistakes and errors. I presume I was not alone in believing a great deal that has been written and said with regard to the ease of raising worms in barns, open sheds, &c. Of the falsity of this, at least in this climate, with our changeable weather, cold nights, north-east storms, I have become thoroughly convinced. To ensure a reasonable degree of success a cocoonery ought to be finished off, and plastered to keep off rats, mice and other vermin; to be furnished with a stove to warm the room in stormy days and cold nights, and conveniences for ventilating in warm, close weather. For the want of artificial heat, the worms will be from 1 to 2 weeks longer in going through their several changes. Mine have lingered along forty or fifty days, while others fed in the neighborhood with the advantage of a close room and artificial heat, have wound up in thirty-two days; and this summer I had many of my millers carried off in the night by rats, bats or something else, before they had deposited their eggs. The worms if fully supplied, will eat almost incessantly with the exception of the moulting periods, from the time of hatching until they are ready to wind up, unless they are interrupted by a temperature so low as to benumb and stupify them. The time of this interruption, I believe, must be added to their existence in the form of the worm, and that too whether the interruption is caused by cold weather or want of food. This reasoning I think will account for the fact, that worms thus treated, rise so irregularly; some are more vigorous and healthy than others, and consequently better able to withstand the effects of the cold; they therefore do not lose so much time.

I lost more than two thirds of my crop this summer by a disease which appeared among the worms after the last moulting, and just as they were beginning to rise. On the appearance of the disease they ceased to eat, became stupid, and gradually assumed a bright yellow color. In the last stages of the disease, they would burst with the slightest touch, and emit a yellow liquid and a very offensive odor. I thought the further spreading of the disease was finally checked after it had carried off thousands, by carefully picking out all that showed any signs of the disease in their appearance, and throwing them away. I attributed the disease to the want of artificial heat in the cocoonery, and to feeding the worms with the tender succulent and young leaves of the multicaulis, after the last moulting. I have been told by one who professed to know, that in this age, the worms should be fed only on the old and tough leaves; if this is the case, it will not do, as I have been accustomed, to cut the branches, and strew them entire upon the feeding shelves. Again, I find that the worms do better to be fed regularly and at least six or eight times in 24 hours.

It seems to me that it is to be desired that some easier and better way of stifling the chrysales should be devised than I have yet known of. I have tried baking, exposure to the direct rays of the sun, and direct steaming; the first I think hardens the gum and makes them more difficult to reel, besides the danger of burning the cocoon. The second is not in all cases effectual; and by the last process I had many cocoons damaged or entirely ruined by the condensation of the steam on the lid of the steam-box, and thence dripping on the cocoons. The steam also softens the cocoons so much that they are liable to be bruised and injured in spreading them out to dry. I intend the next season to try the vapor of alcohol, or spirits of turpentine.

Even after we have succeeded in raising the worm and stifling the cocoon, there is another enemy, either the tug or worm, which attacks the cocoons after they have been put away out of the reach of mice and rats.

A few days since I took down a bag containing four bushels of flossed cocoons, which had been for some time hanging up to the rafter, as I supposed, in good order and in perfect safety. Upon examination many of them were found to be punctured with a small round hole about as large as a coarse knitting needle; consequently, instead of realizing the full price for flossed cocoons, ($4.00 per bushel,) I was obliged to sell them for $2,00.

But after all this long story about failures and mistakes, I am by no means discouraged. I believe all these difficulties may be surmounted by perseverance and greater attention, and it seems to me that the great fault with writers on this subject has been that they have labored to make the community believe, that silk could be successfully made by the same slip-shod and careless manner which obtains in a majority of the farming operations of the day; but it is not so. The business, to be profitable, must be well attended to, and "whatever is worth doing at all, is worth doing well."

One of my neighbors, (L. L. Coleman,) has raised a good crop of silk this summer, and without any accident. He showed me a few days since, seven pounds of new silk of his own raising and reeling, which appeared to be of the first quality.

Yours, with much respect,
W D. COOK.

P. S. I cannot close this communication without requesting you to sound the note of alarm to the readers of the Farmer relative to the black canker on plum trees. In a recent trip through a part of Wayne, Cayuga, and Onondaga counties, I was astonished at the great extent and fatal character of the disease. From South Butler, in Wayne county, to Syracuse, in Onondaga county, I did not see a single plum tree which appeared to be perfectly healthy, while I saw hundreds that were entirely dead. What is the cause? W. D. C.

Yates County Fair and Show.

The following intelligence, which we extract from a Penn Yan paper, affords gratifying evidence that the right spirit is at work in that quarter.

"The 20th of October was an auspicious day for Yates county. The meeting at Penn Yan on that day was a gathering of her true nobility, viz: her hard-fisted, intelligent farmers and mechanics. Such a meeting has a moral in it—it is a kind of pulse which indicates the tone of feeling and interest which the farmers of the country have in their own pursuits. Judging thus of the meeting on the 20th, we can but infer that the farmers of Yates county are beginning to feel and appreciate the nature and importance of agricultural improvement and advancement. This was the second fair ever held in the county, and it was one every way worthy and creditable to the agriculturists of the county. The improvement in stock since

last year was apparent to all. The large number of fine blooded calves, colts, pigs, &c, on the ground, was conclusive evidence of the improvements which are going on, and which promise much for the future. But to the Fair.

The day was not pleasant—cold, cloudy, but no rain. Early in the day, people began to make their way to Penn Yan; on every road might be seen the farmer with his stock seeking in the true spirit of emulation, the place of exhibition; here a cow and calf, there a noble Durham bull, docile as a lamb and led by the hand of a boy; and then again the quiet, innocent looking Saxony and Merino ewes, and the fine coated and prouder looking bucks; and with the lowing of the beards and the bleating of the flocks, was the less melodious voice of the grunter tribe, the Berkshires, &c of our farmers. On they came, presenting a singular appearance, the commingling of man and beast, each dressed and fitted for a gala day.

At eleven o'clock, the various yards, now full, and to the looker-on from the steps of the Court House, the scene was animating and full of interest; there in that moving mass, were the producers, the hard-working, wealth-creating men of Yates county. Now came the various committees, and leaving them to their examinations, we will enter the Court House, and see what is there worthy of notice; and here comes the handy-work of woman, to cheer and enliven the scene—the substantial uniting with the ornamental—the comforts commingling with the luxuries of life. Fruits and flowers, vegetables and plants, the products of the dairy and the spinning wheel and loom—here a splendid specimen of ingrain carpeting, with its many colors beautifully arranged—and there the substantial and tasty coverlet, bespeaking a timely preparation for the cold of winter; and then, as a climax to the whole, the beautifully ornamented hearth rug, and the unsurpassed workmanship of the ottoman and stand rugs, with their finely wrought pictures and representations, such as none but the taste and industry of woman could produce—and with these their handy craft, was woman herself, the best and loveliest of all. Now, where shall we go?

Let us down for a time, for you perceive there is a rush for the Court House; the hour has come for the meeting of the society, to hear the address, reports, &c. The house is now crowded and jammed full—the President is in his seat, and the voice of the strong man has charmed the vast audience into silence and attention. Well, the address is finished, and was it not a good one—full of just sentences—of deep and well digested thought—of sound and wholesome advice, and of elevated and commanding eloquence? and take it all in all, style, manner and sentiment, it was the best, among all the good things, that we ever heard from Francis Adams. But we must hurry on—

The Monroe County Reports.

Mr. Colman having been necessarily absent during most of the past month, was unable to copy his Address for publication as soon as was expected. The pamphlet containing the address and transactions of the Society is now in preparation and will be ready for distribution very soon. The following are extracts from the Reports.

Report on Ploughing.

The committee on ploughing respectfully report,—that the number of competitors on the ground was greater than they have ever before seen—seventeen having entered the field and several were disappointed on account of the whole ground that was fit being occupied. The show of teams, ploughs and plough boys, was highly creditable to Monroe county, and would have done honor to the oldest and richest county in the state. But to speak of the *work*, the committee feel themselves unable to render that praise which the competitors justly deserve; the whole 17 having performed their work, as we think, to the entire satisfaction of the most fastidious and particular person that can be produced. The committee perambulated the ground for nearly two hours, before they could even satisfy themselves where the preference should be given, and it is perhaps a mere lottery decision as we have decided; so nearly perfect were a large number of the lands ploughed.

The committee came to the conclusion to prefer the work where the furrow slice was most perfectly inverted without lapping, reference being had to the straightness and uniformity of the furrows; believing that the poorest ploughs leave the furrow on edge, and ordinary ploughs leave it half turned over and resting on its fellow. The committee are aware that a diversity of opinion exists on this subject, and they may be in error, but if so, it is not from any interested motive. They think the most perfect plough is the one that most perfectly inverts the furrow and buries every particle of the grass, particularly for fall ploughing and spring crops. The opposite opinion may with consistency be maintained for the ordinary summer fallowing.

The committee therefore report the following persons entitled to the Societies premiums.

The first premium to George Sheffer, with the "Premium Plough," held and driven by John Sell. Quarter of an acre ploughed in 42 minutes.

The second premium to Donald McNaughton, with the "Caledonia Plough," held and driven by Robt. Pattison.

The third premium to Charles Burr, with the "Cayuga County Plough," held and driven by O. Parker.

The fourth premium to John H Robinson, with the "Livingston County Plough," held and driven by himself.

To Robert H. Brown of Greece, the first premium for the best work done by oxen, ploughed by Joseph Brown, with the "Wisconsin Plough."

The committee dare not trust themselves to particularize, or bestow that praise that is due to others to whom they have not awarded premiums: as it would embrace every individual on the field; but they cannot omit to mention with great satisfaction, the work done by the Howard, Monroe County, Livingston County, Genesee County, Locklin and Scotch Ploughs, and the individuals who handled them. It is particularly gratifying to the committee, to notice the great attention and improvement in that part of the manipulations of agriculture which must be considered the base upon which the whole superstructure rests; and it speaks well for the county which has been selected as the Banner County, where is to be held the great State Fair for 1843.

All of which is respectfully submitted by the committee.

L. B. LANGWORTHY,
C. F. CROSMAN.
FRANKLIN CATE.

Extracts from the Report of the Committee on non-enumerated articles.

ATWATER'S STEAM GENERATOR.

Stephen Atwater of Rochester, exhibited an ingenious Portable Steam Generator, a new invention of his own, that promises to be of great service to Farmers. With 6 lbs. of dry hard wood it will cause a barrel of water to boil in 20 minutes. Its cost is only $15. We award the inventor a premium of $6.

NEW HAY KNIFE, &c.

Messrs. Barton & Smith of this city, exhibited a very choice collection of Cutlery and Farming Implements, among which was a new kind of Hay Knife of their own invention, which the committee believe to be a great improvement, and they recommend it to the examination of all who have use for such an article. The committee award each of the gentlemen a bound volume of the Transactions of the N. Y. State Agricultural Society.

OIL AND CANDLES FROM LARD.

The committee would close their report by calling the attention of the members of the Society to the lard oil and stearine candles, specimens of which were exhibited from a manufactory at Cleveland, O. These two articles must hereafter attract much attention throughout the whole country. The lard oil is already in great demand for machinery and manufacturing, and has been used in several of the light houses on the lakes, and is said to burn clearer and longer than any other, while the cost is only about one half that of sperm. It has lately been discovered that oil, equal to sperm, can be extracted from lard to great advantage. After extracting the oil, the stearine remains and forms a substance similar in every respect to spermaceti, and the candles from this can be afforded for from twenty five to thirty cents per pound. These articles are already becoming quite common in the state of Ohio, where large establishments are engaged in manufacturing them, and where the nature and utility of these substances are generally understood, it will readily be seen that it must have a most important bearing upon agricultural profits.

ALEX. KELSEY,
W. C. CORNELL,
N. HAYWARD.

Rust on Wheat Straw.

It is stated in a communication on page 147 of our last number, that cattle thrive much better on rusted than on bright straw. The writer suggests that the rust affords positive nourishment; but is it not far more probable that its superiority is caused by the unthreshed grain, which, from the difficulty of shelling out, the rusted straw contains?

It is also suggested there, as well as frequently elsewhere, that a strong and sudden flow of sap *bursts* the straw. Would it not be simpler as well as more philosophical to suppose, that the external tissue cracks open merely from the action of outward moisture, as ripe fruits often do in rains,—instead of by an explosion? The opinion that rust is dried sap, is, I believe, satisfactorily disproved by the fact, that the microscope shows it to be a real fungus, a parasitical plant, with its several parts as distinct as those of a mushroom. And that this plant spreads by the seed, thus rendering the disease contagious, is proved by the facts stated in the communication of J. B. Bowen in the last volume of the Farmer. J.

From the Mark Lane Express.

Cheap Food for Horses.

A proposition has been made to the French Minister of War, by a M. Longchamp, to try a new method of feeding horses, which he asserts will produce a vast saving in the amount of forage necessary for the army. This gentleman proposes to make a sort of bread, three-fourths potatoes, and the rest oatmeal, with which the horses are to be fed in place of oats. The average quantity of oats for a horse per day, M. Longchamp estimates to be 10 lb., costing about 13 sous. He proposes to replace this food by 10 lb. of the bread made with oats and potatoes, the price of which will be only 5 sous, leaving a saving of 8 sous a day. As there are 80,000 horses in the army, a saving would arise on the whole of the cavalry of 11,680,000 fr. a year. M. Longchamp considers this food to be more nutritious than the food generally given to horses, for a great portion of the oats taken by a horse are imperfectly masticated, and therefore the nutritive qualities are allowed to remain latent. Heat and moisture, he declares, are necessary to bring forth fully the qualities of the fecula of oats, and this can be procured most effectually by subjecting it to the heat of an oven, after having been moistened and well mixed up. Cakes of this kind have been long used in Holland with profit; and M. Longchamp expresses his surprise that potato-flour has not been more commonly and openly mixed with bread; bakers, he says, being in the habit of using it. But this is not the only advantage to be gained by this proposition. A hectare of oats (2½ acres) is worth about 92 fr., whilst one of potatoes produces 240 fr. M. Longchamp thinks that, if one third of the land at present under cultivation for oats were planted with potatoes, five times a greater quantity of cattle could be bred in France. By this means butchers' meat would become cheaper, and be within the reach of the generality of the inhabitants of the kingdom. The more generous diet thus procured would have a considerable influence, M. Longchamp declares, on the average height of the natives of France, which the recruitment of the army proves to be each year decreasing in stature.

For the New Genesee Farmer.

Translations from the German.

GRAPE VINE CUTTINGS.

M. Frischer, the superintendent of the gardens of the Duke of Weimar, employs with success, the following method of propogating the more choice varieties of wine and table grapes, by means of cuttings. He selects from among the stalks and branches cut away in fall and spring pruning, such as are of suitable diameter—say from ⅜ to ½ inch.—and have well ripened wood. These he cuts in pieces midway between the buds, and splits each piece lengthwise, preserving the bud uninjured. The halves containing the buds are then placed with the flat side on a bed of well prepared garden mould, gently pressed down level with the surface, and covered with moss, or a layer of fine leaf mould. Thus planted, the cuttings speedily strike root, if the bed be kept moist by occasional waterings, and properly shaded, without obstructing the circulation of the air.

Cuttings similarly prepared, though not split, readily strike root and produce vigorous plants, if their ends be dipped in melted sealing-wax, and they be planted in good garden soil, covering them in to the depth of half an inch. The ground must be kept moist, and free from weeds.

GRAFTING.

M. Schroer recommends using a branch of common willow, an inch or two in diameter, in the following manner, as a matrix for receiving the grafts of such varieties of apple, pear or quince trees, as it is desirable to multiply. Make longitudinal cuts or slits *through* the branch, at equal distances of 15 or 18 inches. Take grafts having two perfect buds, give the lower end the usual wedge-shape, using a keen knife, and insert them in the slits of the willow, making the lower bud sit close to the slit. Then bury the branch in a trench formed in good garden soil of such depth as will permit the upper buds to protrude just above the surface of the ground, when the trench is again filled. The ground must be watered occasionally if the season be dry, and weeds must be carefully extirpated whenever they appear. In the spring of the following year, the branch may be taken up and cut in pieces, leaving a small portion to each of the growing grafts—which are to be replanted in a nursery. The willow does not form a permanent union with the grafts; but merely supplies nutriment till the proper fibrous roots are produced from the lower bud.

POTATOES.

M. Bellamy Aubert, of France, states, as the result of experiments continued during three seasons, that abundant crops of potatoes may be grown in poor clayey soils, by simply strewing the sets plentifully with rye-chaff previous to covering them with earth at planting.

Professor VOELKER, of Erfwet, covers his potatoe sets with a layer of tanners' spent bark, two or three inches thick, before turning a furrow over them. He says he thus provides a loose spungy bed for the young tubers; prevents weeds from springing up and growing in immediate contact with the plants; and secures an abundant supply of moisture during the season, if but one soaking rain occur after planting—as the spent bark, covered by the surface soil, will retain water during the most protracted drought.

FRUIT TREES.

Dr. Zimmerman, of Zinzow, alleges that the natural productiveness of fruit trees is injuriously affected by the practice of training standard trees high, or pruning off the lower side branches. This training is usually commenced in the nursery, and continued even after the tree is transplanted to its permanent position in the orchard—resulting in giving the tree a main stem 6 or 7 feet high. Dr. Zimmerman contends that trees of the same class or variety, thus treated, are never so productive as those which are suffered to assume a more natural form and developement; and he refers, in proof of his theory, to the fact that orchards belonging to persons who know little of the modern scientific refinements in horticulture and whose trees are very scantily pruned, are invariably more productive than those whose owners keep them in regular subjection to the knife. Permitting trees to branch out lower, would perhaps involve a greater waste of ground, in orchards especially; but the increased productiveness of such trees, would, in the Doctor's opinion, abundantly compensate for this. There are moreover many plants which could be advantageously cultivated in the shade of such trees.

The truth probably, in this case also, lies between the two extremes—and possibly the whole matter may resolve itself into this, that the more horizontally the branches of fruit trees are trained or permitted to grow—which appears to be Nature's tendency—the more productive of fruit will the trees be. In training fruit trees against walls, it is known to be advantageous to give the limbs a descending curve. This effect will be naturally produced, if the trees be permitted to branch out nearer the surface of the ground than is customary. The limbs, in this case, assume a nearly horizontal direction, and are subsequently curved down by their own weight and that of the fruit they produce, and the result of the whole is, a greater tendency to the formation of fruit buds.

MADDER.

The proprietors of small farms in the Grand Dutchy of Baden, cultivate madder, of late years, with much success and profit. The plant requires a rich soil, free from weeds, and the root yields a beautiful and durable red color only when it is permitted to attain to perfect maturity in the soil—which is not till the close of the third year of its growth. Roots of one year's growth are indeed used in Avignon, but the dye prepared from them is not durable; and that from two year old roots is very little better. Good madder, yielding a rich and durable dye, can be prepared only from roots not less than three years old; and if two of the summers were very hot, the dye will be the brighter and more permanent. When it happens that the summers are unusually cool, the roots are not taken up till the close of the fourth season. Southern plants, acclimated and cultivated in northern latitudes, require great care and judgment in their treatment, to prevent deterioration; and the madder plant does not appear to be an exception.

FROZEN POTATOES.

The results of repeated experiments show that potatoes injured by frost are not rendered valueless; but that very good flour or meal may be prepared from them, if the weather continue sufficiently cold to permit of repeated thawing and freezing. By this process, properly conducted and continued, the watery particles are expelled, and the inner of vegetable substance is gradually converted into meal. Exposure to rain and snow is injurious only as prolonging the operation. The meal or flour thus formed, can be readily separated from the outer skin or peel. M. EINHOFF exposed soft watery potatoes to the action of frost in this manner, and obtained a very superior flour, which was preserved in good condition for two years, even in a damp cellar. When it happens, in consequence of the unusual severity of the season, that large quantities of potatoes are injured by frost, excellent and nourishing meal may by this process be prepared therefrom, with very little expense or trouble.

Travellers relate that, in the native country of the potatoe—the more elevated and colder regions of Peru—the inhabitants expose quantities of this vegetable to the action of frost, for a similar purpose. After repeated alternations of freezing and thawing, the whole mass is thrown into a kind of vat and well kneaded or trodden with their feet to separate the skins or peels. It is then put into coarse bags, and placed in a stream of clear running water, where it is left three or four days. When taken out, it is spread as thin as convenient and dried in the sunshine; and thereafter ground into flour.

Professor POKE, of Leipzig, in his Archives of German Agriculture, recommends that the same method be employed when apples, pears, or turnips are accidentally injured by frost.

Potatoes are neither so productive, nor of so good quality, in warm as in cold climates. In Spain and the south of Italy, the vines are thicker and longer, and the foliage more dense and luxuriant than in the more northern countries of Europe where this vegetable is cultivated; but the tubers are smaller in size and fewer in number. In Colombia, large potatoes and abundant crops are produced only in the more elevated mountain regions—rising from 8000 to 10,000 feet above the level of the equatorial seas. The same appears to be the case in the United States—the potatoes of Maine greatly excelling those of the middle or southern state in quality and flavor, and the average crops are much more abundant.

ITALIAN RYE-GRASS.

In the Grand Dutchy of Mecklenburg, the Italian Rye grass *(Lolium perenne italicum peristatum,)* is found to be far superior to, and much more productive than, the English Rye-grass. Early in March it presents a rich, green, and vigorous appearance. The stalks and leaves are soft and juicy, and it is fit to be cut for hay early in June. The second crop produces a large quantity of seed, if cut early in September; and the after growth yields plentiful and succulent pasturage. The seed is smaller than that of the English Rye-grass; and when produced from the second crop, is generally very clear and pure. The Italian Rye-grass would probably be valuable for forage, in northern districts, as it is sufficiently hardy to stand the winter. For soiling cattle it is found to be particularly valuable.

HORSE CHESTNUT HEDGE.

Wenzel Hannock, of Moravia, recommends the Horse Chesnut, *(Aesculus hippocastanum)* as best adapted for forming a hedge impervious to men or animals. The seeds, when gathered, are spread out in a dry and airy chamber for a few weeks. They are then planted in a shallow trench formed by a hoe or a plough, dropping them four or five inches apart in the row, and covered with earth. The young plants will appear about the close of the ensuing April, and should be kept well weeded. In the spring of the third year, before the sap begins to flow, the stems are bent accross each other so as to form a kind of wickerwork, and bound firmly together at the crossings by means of willow twigs, or bass. If this be well done, the trees unite permanently at those points, forming a lasting and impenetrable fence. By proper care in the subsequent pruning of the hedge, denseness can be greatly promoted, and a neat and handsome appearance imparted to it.

On Animal Manures.

(Translated from the German.)

The bones of different species of animals differ much as to their component parts, and therefore are not of the same value. As far as nitrogen is concerned, the bones of cattle are the best, whilst those of horses and sheep are preferable on account of the greater amount of phosphate. Those who use bones as manure should bear that in mind.

As far as the use of bones for manure is concerned, it is requisite that they should be previously reduced

into the finest possible dust, which, however, is a difficult operation, on account of the toughness of their cartilage. The operation is performed by pounding or grinding, sifting the dust, and pounding and grinding the coarse pieces again. Fine pulverisation is absolutely necessary, in order that the cartilage may be the sooner dissolved in water, and the phosphate of lime in the acids of the soil. The coarser the dust the more it will take to manure a certain area; the finer, the less; however, the coarser powder will act during a longer period. Of fine bone dust, 700 lbs. to 800 lbs. will suffice for the Magdeburg acre; of coarse, 1200 lbs. to 1500 lbs., especially if an immediate effect is expected. Heavy clayey soils will require more than light loam or sandy fields; and if bones are to be used efficiently upon dry sandy soil poor in humus, the bone dust must be first mixed with humous earth, and be left to rot, as we shall state hereafter. Bone-dust always acts best if brought into close contact with the roots, and should therefore either be harrowed in with the seed, or used as a top-dressing. In England, it is drilled in the ridges, where turnips are sown. 700 lbs. per acre will act even after three years, as I have found by several experiments; the first year, however, the action will be the greatest if the season has not been too dry. It has been assumed, that 200 lbs. of bone-dust are equivalent in their action to 500 lbs. of dry manure, which, however, is a very uncertain calculation, for the quality of the manure must be taken into account.

If bone-dust is to act properly, it is necessary that the soil should not be deficient in humus and moisture; because both cartilage and phosphate of lime are substances with difficulty dissolved in water; the latter especially being only soluble in water by the acid of the humic or carbonic acids derived from humus. Moisture is also indispensable, because it is necessary to bring about the change of cartilage into ammonia and carbonic acid. Humic acid is of equal importance, for the sake of neutralising the ammonia generated from the cartilage and fixing it. If then manuring with bone dust has been occasionally found to be unsuccessful, it may have been caused by the deficiency of humus or moisture. To be certain, then, that done-dust will produce the desired effect in a dry soil devoid of humus, it is always best to mix it with humus earth and to throw them into a hole. This mixture being kept wet will become rotten, much humate of ammonia will be formed, and it may then be used as a top-dressing, or be harrowed in with the seed. Bone-dust will become equally efficient if previously put into a urine-tank and permitted to decay. The phosphate of lime will thus be decomposed by the carbonate of ammonia that arises from urine, the result of which will be the generation of phosphate of ammonia and carbonate of lime. The former salt is very soluble in water, and will therefore—even if there be but little humic acid in the soil—easily provide plants with the necessary amount of phosphorus, as well as nitrogen. Experiments which I have made with the phosphate of ammonia have shown that it is very beneficial to plants. It has been also recommended, when bones have been merely crushed, to mix them with quicklime in a ditch, and to let them rot there: but this process is bad. The consequence of it is, that the whole of the ammonia developed from the cartilage will escape as gas. Equally objectionable is the plan of packing bone-dust in heaps before using it, wetting it, and letting it rot in that state; because, in this instance also, the ammonia will assume the form of gas. If, on the contrary, as shown above, humous earth is mixed with the bone dust, all the ammonia will be fixed by humic acid. If the bones contain much fat, a sort of ammoniacal soap, easily soluble in water, will be produced. Those vegetables will be most advanced by manuring with bone dust in which much nitrogen, phosphorus, and chlorine are to be met with, to which class belong all sorts of cabbages and turnips, wheat, trefoil, beans, peas, and vetches. Used on meadows, bone-dust brings up different species of trefoil and vetches, and at the same time generates a rich herbage, much relished by cattle. It has been objected to bone manure, that it brings to the land worms and insects which destroy the crops; but this will not be the case if the bone dust has been previously mixed with humus earth, and is thoroughly rotted; because, in that case, the cartilage, which attracts the worms and insects is decomposed. To lighten a clayey soil by coarsely crushed bones, as some have suggested, is, at the high price of bones, quite out of the question on account of the expense.—*Farmers' Journal, Eng.*

Good Reason.—A secretary of state being asked by an intimate friend why he did not promote merit, aptly replied, "Because merit did not promote me."

Ridge versus Flat Drill.

To the Editor of the Doncaster Gazette:

Having heard various discussions on the relative merits of ridging and flat drilling white turnips, I resolved this year to bring the matter to the proof, by trying the experiment in two or three fields. I tried in one instance flat drilling on land which had laid a fortnight, against ridging and drilling on fresh mould; the flat 16 inches apart; the drilled or ridged 27 in. apart. They were both carefully hoed and singled; but the flats yellowed very early and stopped growing; whilst the ridged luxuriated in their ample space, and grew to an uncommon size: the difference in the weight of crop per acre is to the amount of some tons. Adjoining these I ploughed down manure, and drilled on the flat, but they scarcely did better than the other, though they had all the same top-dressing; whilst the ridged ones, immediately contiguous, with the same quantity of manure, did exceedingly well. A few further observations I made on these experiments may not be without interest; we took a few loads of dung, or rather litter, fresh from the fold, the exact soil that modern science so greatly approves, but the turnips rejected the new fashioned viewe, and grew both sulkily and tardily; indeed the difference was astonishing between this and Christmas-led and once-turned manure. In the same field some were not rolled, some done with a wooden roller, and some with a heavy stone one, across. The effect on the turnips was slight, but on the weeds important: for, just according to the weight of the roller, had the weeds been repressed in their growth.

Should these observations be worthy a place in the Gazette, you will, by their insertion, greatly oblige yours, &c.

AN ISLONIAN.

P. S.—I venture an assumption for the purpose of eliciting remarks from some of your numerous readers, that fold manure acquires more vegetative qualities during the process of fermentation than it loses by the escape of ammonia.

From the Albany Cultivator.

Water Lime--Cisterns.

Charles Merriwether, of Graysville, Ky., requests some "information as to the burning water or hydraulic lime, the best sand to mix with it, and the mode of making cisterns."

Hydraulic lime is burned in the usual manner, but as it will not slake like common lime, it is ground to fit it for use. Hydraulic lime varies so much in quality, that no general rule can be given as to the quantity of sand it will bear in making cement.—When good, three bushels of sand to one of lime, will be the proper quantity, although some use more sand. The sand should be sharp and clean. There should be no clay or loam among it; since if these are present, the cement will not have the requisite hardness, or set quickly. The best method of making cisterns, is to dig the excavations of the proper size and depth: then make over the bottom a firm floor of stone, or brick laid in cement. (a single flat stone like those used for paving, that will make an entire bottom, is the best,) and on this foundation build the wall of stone or brick for the reservoir. Whatever may be the material of the wall, it should receive one or two coats of cement on the inside, to insure its being water tight. Some, in making cisterns, place the cement on the earth of the pit, using neither stone or bricks. Where the ground is very dry, and the sides can be made smooth, this method, where two or more coverings of cement are used, may answer; but in general, the best way is to construct a wall as above directed. The cistern when made must be covered so as to be secure against frost. In making the cement, it must not be wet up, or prepared, faster than it is wanted for use, as lying for any considerable time spoils it.

We recognise below the hand of an old friend, whose authority is unquestionable.

From the New England Farmer.

Seeding on Green-sward Furrows.

Mr. Putnam—In your paper of the 31st of August, there is an inquiry, in what part of the State the experiment has been made of seeding on green-sward furrows, and how the farmers liked the practice. We are disposed to give "Essex" information concerning our experience and practice, without participating at all in the dispute whether this be old or new husbandry.

Some twenty or twenty-five years since, the writer was told that Mr. Z. Estis, of Hanover, practiced ploughing sward bound fields, manuring and seeding with grass, without any intervening crop. The first suggestion of such a course was sufficient inducement to make an experiment, as much fruitless labor and expense had been given in attempts to raise grain crops on cold and clayey soils. Every experiment made has been attended with very satisfactory results. There is no loss of crop in the course, and yet most of the purposes of naked fallow are fully accomplished. The gradual dissolving of the sod prevents the soil from falling into too compact a state, (a common evil on low lands) and imparts nourishment for many years to the new grass. We have a field which was ploughed and seeded in August, 1825; it has not been very frequently or copiously dressed with manure, and is still in better condition than mowing fields generally. Another field, seeded twelve years ago, and dressed once in two years, produced this year a very large first crop and a second is now ready for mowing.—This practice is worthy of all commendation on land not suited to grain crops. Where Indian corn would be likely to grow well, we should think it a more economical and better course to plow in the spring, apply manure, plant with corn, cultivate with a level surface, and sow grass seed at the last hoeing.

"Essex" seems disposed to blame farmers for neglect in communicating to the public, if the system concerning which he inquires, has been pursued "for a long course of years." Remissness in communication is no doubt an easily besetting sin, and the writer will not deny that it sometimes lies at his door; but on this subject there is no conscientiousness of any improper reserve on his part; all suitable occasions have been embraced to direct the attention of farmers to a practice so intimately connected with their interests and prosperity. All practicable publicity has been given to views entertained on the subject. In an account of the cultivation of the writer's farm, which was published in the N. E. Farmer, vol. x., page 360, this practice was mentioned as part of the system pursued. In the county of Plymouth, the practice has not been extended proportionate to its utility; but we have the satisfaction of seeing a good number of farmers every year adopting it, and where one experiment has been fairly made on a farm, an intelligent owner will be very certain to repeat it.

M. ALLEN.

Pembroke, Sept. 2d, 1842.

Erie County Agricultural Society.

The second fair this season, of this Society, was held at Buffalo, Nov. 15th, for the exhibition of grain and root crops. The following are the awards of the viewing committee:

ROOTS.

Best one quarter acre carrots, 1312 bushels to the acre, Manning Case, Black Rock, $3.

Second best one quarter acre of carrots, 1040 bushels to the acre, Abner Bryant, Black Rock—Diploma.

Best one quarter acre ruta bags, 1000 bushels to the acre, Abner Bryant, Black Rock, $3.

Best one quarter acre beets, 1280 bushels to the acre, Abner Bryant, Black Rock, $2.

JOHN WEBSTER,
JOHN CARPENTER,
DAVID P. WHITE, } Committee.

GRAINS.

Best acre corn, 57 bushels to the acre, Thomas C. Love, Newstead, $4.

Best acre barley, 42 bushels to the acre, John Carpenter, Wales, $3.

Best acre oats, 67 bushels to the acre, John Webster, Hamburgh, $3.

DISCRETIONARY PREMIUM.

To Manning Case, Black Rock, one-half acre corn, 51 bushels to the acre—Diploma.

A. CALLENDER,
A. BRYANT,
WM. HODGE, Jr. } Committee.

The attendance was very small, owing probably to the bad state of the roads. There was no application for the premiums on wheat, rye, buckwheat, peas, beans or potatoes. And on the articles to which premiums have been awarded, there was no competition. The samples exhibited, however, were superior.

WARREN BRYANT, *Sec'y.*

The late Thunder Storm.—A curious incident occurred in a crowd; the finger of an individual suddenly became light, and was conducted with electrical velocity into another person's pocket, when being attracted by the metal, it struck upon the whole of it, and then glided off, so that the bolt which usually follows was quite in another direction.—*Punch.*

Mediterranean Wheat.

Mr. Colman—Practical farmers have been so often imposed upon by humbugs, in the shape of new articles of agricultural produce brought to their notice through the columns of agricultural papers, that they have formed a distrust, and justly too, of all such communications, especially when they find at the bottom, the very disinterested offer of "only a small quantity," for sale at the moderate rate of four times the market price of the same article. And I will take the liberty to add, that the publication of such communications, and particularly when upon trial they prove to be sheer impositions, tends greatly to lessen the character and influence—yes, and the circulation and perusal of agricultural periodicals, and forms one of the chief arguments brought up against what is called "book farming."

I am led to these remarks by reading in your truly welcome Genesee Farmer for September, the article headed "Mediterranean Wheat," from the Hon. H. L. Ellsworth, the very worthy Commissioner of Patents at Washington City.

As one humble individual practically engaged in farming, I have much admired the indefatigable exertions of that gentleman to promote the agricultural interests of our country, and I doubt not, I shall be joined by the mass of farmers throughout the Union, while I most heartily tender him my thanks therefor. I hope and trust that his great zeal and devotedness in the cause, may not get the better of his judgment, and lead him into errors or statements, the publication of which he may at some future time regret.

The new variety of wheat which is now brought to the notice of the wheat growers of Western New York, is recommended as being "proof against the fly and *almost* proof against rust." Mr. Smith gives us no reason why the fly does not attack the Mediterranean Wheat,—indeed he says frankly, that no explanation *can* be given,—but he knows it is so and that is enough. I regret this, for I should be pleased to see how he would set himself to work to account for it.

Now, sir, such an argument, or rather, such a statement, has no weight with me, and I doubt whether many Western New Yorkers will be found willing to pay two or three dollars per bushel for his wheat upon such a recommendation. They know too well, that Mr. Fly is not a discriminating gentleman, but will attack the wheat plant without regard to varieties or high sounding names,—or whether it be "far fetched and dear bought," or the humble production of our own soil. In the other recommendation, its being "*almost* proof against rust," there is somewhat of plausibility, if this wheat does certainly ripen ten or twelve days earlier than any other variety.

The yielding qualities of this wheat, the most important item with the wheat grower, are stated only by guess-work. Mr. Smith says he has cultivated it after corn and potatoes, and that after the potatoes *he thinks* yielded full 30 bushels per acre,—but does not even *guess* at the yield after the corn.

If he wishes the farmers of Western New York to purchase his wheat at an exhorbitant price, why did he not measure his ground and his crop, and state the exact result? Why did he not state the kind and quality of soil—the course of cultivation—the time of seeding—and the time of harvesting?

J. HORSEFIELD.

Castile, Wyoming Co., N. Y.

In the main, we perfectly accord with our friend Horsefield, but we think we should not let his communication go without some qualification. In respect to editorial responsibility perhaps he demands too much of us. What we publish under our own name or authority, we are entirely responsible for. What we publish, though it may be mere hearsay, in a style of encouragement and in a way to imply that we credit it, we are to a degree responsible for, at least so far as our character for good judgement is concerned. But what we publish under another man's name, he and not we are wholly answerable for. Mr. Smith and Mr. Powell are responsible for the statements to which their names are attached. We confess ourselves incredulous in regard to the peculiar properties of the wheat recommended, because, first, the statement seems improbable; next, because no reason, it is admitted, can be given why this wheat should not be as subject to the fly and the rust as other; and third, because we do not know personally either of the gentlemen mentioned and the offer to supply the seed, (though not as our friend suggests, at an exhorbitant price,) would lead to the inference that some self-interest was at the bottom of it. But we do not think the inference is a very strong one. What it is every farmer can judge for himself; and a very small quantity of the wheat for trial, say half a bushel, would not be likely to involve a farmer in any ruinous risk. We think it clearly worth the trial. As to Mr. Ellsworth, his disinterestedness in the case is beyond all question; and his zealous efforts for the agricultural improvement of the country, entitles him to universal respect and gratitude.—Ed.

Moral and Intellectual Culture.

Having in my last communication, touched but slightly on what I conceive to be the duties of mothers, I would now invite their attention; incapable though I am, of doing justice to this subject, but the importance attached to it, induces me to endeavor to arouse the slumbering mother, to engage in the cause of intellectual cultivation, and thereby pave the way for all the innocent pleasures and exalted enjoyments the immortal spirit of man was originally designed to delight in and aspire to.

The mother! how much is expressed in that one word. With it is associated all the most tender, refined and holy feelings of our nature. And who that reflects upon the station she occupies, can doubt that a vast accountability rests upon her. Mothers have you pondered this responsibility? When Heaven placed in your possession that infant form, think you not, no fearful responsibility arose from that relation? To sustain the situation which you occupy with innocence and a clear conscience, is a subject of infinite importance to yourself, to your family, and to the community. For it you must answer to God, who imposes the duty.

Does the mother that feels her children a burthen, the cares and labor she must endure for their sake as grevious to be borne, does she fulfill the manifold duties Heaven demands of her? No! with these sentiments and feelings, it is impossible. There is no one thing, in my opinion, in which there is so much wrong, so much contrary to what it should be, as the principles and feelings imbibed by mothers toward their children. I have seen many a mother that appeared to feel justified in considering a family of children a curse. And why? Because such mothers do not study into the designs and intentions of the Almighty, in instituting the dear and near relation of the mother to her child. They seem not to discern the wisdom and goodness of God—the unbounded mercies and blessings of Heaven, when mingled with the bitter pangs of bodily anguish and mental suffering. Yet the deep fountain of a mother's love will gush forth in constant anxiety, care and labor, in a sacrifice of almost every ease and comfort for their children. This shows plainly and conclusively, that the mother possesses within her own breast, a faithful moniter, which, if adhered to, would direct her not only to provide for their physical wants, but to labor more earnestly and abundantly for their progress in morals, in religion, in that which serves to enlarge the affections for the good and just, and enlighten the mind with the beams of nature's laws and spiritual wisdom.

In that receptacle of anxious care and self-denial, of affection and tenderness in a mother's heart, there should also reign high moral principle, self-acquaintance and self-control, and with these a consecration of all else, to the laws and requirements of the gospel.

In a family little can be effected in the cause of mental improvement, unless the parents act in concert. Take a wife that is fretful, worldly and selfish, and you will soon perceive that all the efforts of the husband are rendered abortive. And also, if a wife be ever so intelligent and active, if she has a husband whose soul never breathed one aspiration or desire for any greater good or better knowledge than wealth can bestow, how little can she accomplish. But even then I would say, try. Never despair of good. Perhaps the husband or the wife might be induced to overcome the wrong sentiments they have cherished, if they should behold in their companion an example of steady devotion to the intellectual and moral improvement of their children and family.

I am well aware, that farmers wives have much to engross their attention in their business; and a great amount of care and labor to endure. But the next question is, are they obliged to subject themselves to such hard duty. The great difficulty is, that mothers allot to themselves far more labor than they ought to undertake. You task yourselves, in my opinion, far beyond your duty; the physical powers to much, the mental too little. It is not uncommon to see a farmer's wife do her kitchen work, washing, ironing, baking, cleaning, &c., the knitting, sewing, spinning and weaving for the family, with the assistance perhaps of a few weeks labor, or some little help. And this, very probably, by one who is abundantly able to afford herself leisure for meditation and reading, for attention to her children; in a word, to intellectual cultivation. But no! they do not possess all the world yet, and until they do, she must toil and labor as unceasingly as if her children were starving for a morsel of bread. Is this right? Is it doing justice to yourself and your family? Is it fulfilling your duty to God? Herculean strength could scarcely endure it. The most healthy and robust feel that they are old while yet young, when subjected, year after year, to so much excessive fatigue and labor. And the half of the difficulty lies not here. Its greatest evil exists in the prostration it affects on the intellectual powers, and religious and moral principles of the heart. One of the fundamental principles in the science of phrenology is, that the organs that are most exercised will develope the most largely, and thereby become the moving springs to action, the most likely to control the whole tenor of our lives; while the neglected faculties, or organs, will perish and decrease, until they are scarcely perceptible. Now whether this science is real or imaginative, as some suppose, I will not attempt to discuss. But I do know, from my own experience and observation, that any of the passions, will, by frequent indulgence, become habitual; and what becomes a seated habit cannot be overcome, without a powerful and persevering effort of the mind. And I also know, that if through carelessness or indifference, we neglect to cherish the tender and benevolent sentiments of the heart, we become cold and selfish; our indifference increases until it becomes a seated principle of the mind and a striking characteristic of the person. I have but just broached the subject, and leave it with regret for the present.

FLORA.

A Sign of Better Times.—Mr. Jonathan Wilson, of Shoreham, Vt., lately received two hundred dollars of Solomon W. Jewett, Esq., of Weybridge, for a Pauler Merino Buck.

Herbs for drying or for distilling should be cut before their flowers expand, and the former laid thinly in a shady place.

Pedantry, says Coleridge, consists in the use of words unsuitable to the time, place, and company.

We have already got somewhat involved in the question of Protection to home industry; but we are not willing to refuse our respected friend Garbutt a place in our columns. The question is in every account, a most interesting one to the farming community; but we do not mean to admit its claims to the prejudice of other important matters, and will not permit it to assume a partizan character. For ourselves, we think the root of the whole matter lies much deeper than either of our correspondents have yet reached. The common arguments, pro and con, are quite hacknied; and we wish they would go into deeper waters, or rather look at it from a higher eminence, far above all the smoke and dust of party conflict.—Ed.

The Tariff--in Reply to S. W.

Mr. Colman—Your fluent correspondent S. W. is so constantly dabbling with the tariff, and is so courteous towards John Farmer for not thinking as he does, that I am compeled to suspect that he is determined to make the columns of the Farmer subservient to his political views, and is so anxious to confute his antagonist that he some times forgets himself

I will take the freedom to notice a few of his statements in answer to John Farmer. He says "had he (John) been as well informed on the subject of our national tariff as he is refined and witty, he would have known that the high tariffs of 1828 and 1833 did not receive even a majority of the votes of the New England States." Now if S. W. had not been so anxious to expose John's ignorance, he would not have made such a blunder as to class the tariff of 1833 with that of 1828, as a high pretective tariff. So far from that of 1833 being a highly protective tariff, it wa an abandonment of the protective system and a repeal of the tariff of 1828. This has been one of the principal causes of paralizing our industry and bringing the country into its present state of stagnation, depression and embarrassment. It is true, as S. W. states, that the tariff of 1833 did not receive even a majority of the votes of the New England States, for the six states had 39 votes in the House of Representatives, of which there were only ten in favor of the bill, viz: 6 from Maine and 4 from New Hampshire; one from New Hampshire being absent. The remaining 28 voted against the bill. Now if this strong vote of 28 to 10 against the abandonment of the protective system and against the repeal of the tariff, is a proof that the New England States are not in favor of a protective tariff, S. W. has a strong evidence of the fact; but to me it has rather the contrary appearance. In the next paragraph he classes the tariff of 1833 with that of 1816, either to show John's ignorance or his own knowledge. The one was about the commencement of the protective system, the other its abandonment.

Again he says "John Farmer asks 'why are our New England factories closed and their hands unemployed at this time?'" He lets a manufacturer of his own town answer, by stating "that a protective tariff would not help them, for they have the whole of the home market without foreign competition;" but here S. W. has left a hole to creep out at, for the manufacturer who gave the answer, is one of coarse cotton goods; his answer, therefore, is correct, as far as that kind of goods is concerned. But, Mr. S. W., John's question was a general one, and applied to all our branches of manufacturing industry, and you gave the answer as such, which goes to say that our manufacturers are not interfered with by foreign competition.

Again he says "the difference of opinion between John and myself is simply this, I want all our great national interests, agriculture, manufactures and commerce, protected by sound and equal laws, but he seems to embrace the delusive notion that we stimulate the manufacturer by taxing the other interests." Now Mr. S. W. if our manufacturers "have all the home market with a fair demand for export," how can a protective tariff be a tax on the consumer? Were there a duty, no matter how heavy, laid on imported water or air, I do not think that it would be much of a tax on us, who drink and breath.

S. W. is correct when he states that "John Farmer does not know that the manufacturing interests of the United States has been fostered more than any other interest." Nor does any other man, for commerce has received hundreds of dollars as protection where the manufacturer has received one.

Again he says, that "so far from specie going out of the country, it never goes out when it is indispensable for a currency at home." If so a poor and needy community will never want money. This is to me rather a new notion; and I should guess that some of our Western States will soon have a plenty of it, for they have been pretty destitute of a currency of any kind for some time. This is a wonderful age for new things and wonderful improvements; it was formerly the notion of us working folks, that a community would be rich just in proportion as they were industrious and economical, and that in proportion as they bought less than they sold, and earned more than they spent, that they would have money plenty, independent of "paper rags," African shells, or any other substitute.

But I would ask S. W., and every honest and candid man, what is the reason that the experience of this country for the past 20 years must be set at naught, and we yet keep prateing and writing about protective tariffs and free trade, as if they had never been tested by experience, and as if there was nothing for us to do but to talk and write.

When the "abominable" tariffs of 1822 and 1828 were passed, the country was made to re-echo from one end of the union to the other with their anticipated dreadful effects. Our commerce would be destroyed, our ships rot at the wharves; our laborers would be made dependent beggars; the farmers and merchants would be ruined by the enormous taxes that they would have to pay, to raise up a *manufacturing aristocracy*. Well, what was the result; those tariffs went into operation, and strange to tell, none of these dire effects followed, but the very reverse occurred in every case. There never was a country more prosperous, nor one where labor and skill were more liberally rewarded than in the United States from 1822 to 1832. Then commerce increased with a double ratio; our cities advanced with rapid strides; laborers of every class found employment and ample compensation; our farmers and merchants were prosperous; and the country advanced rapidly towards wealth and prosperity. Our currency was as sound and as good as it could be; it was not surpassed in the civilized world; a dollar at one part of the Union was a dollar at the other, and by paying the postage of a letter, "our paper rags" could be converted into gold or silver at the pleasure of the holder, and the facilities for exchange were such, that distance was scarcely realized by our merchants. But our wise and knowing ones were not content with this state of things. We must have a change, and with that change we were to have a better currency, and better times for every thing; but we must have a change, and a change we have got. Yet I fear that it will be a very hard matter for even our wise and knowing heads to tell wherein that change has benefited the country since 1832.

Yours, most respectfully,

WILLIAM GARBUTT.

Wheatland, 1842.

For the New Genesee Farmer.

Protective Tariff.--No. 3.

Another reason urged in support of a Protective Tariff is, that it will prevent a consequent drain of our specie. The argument that a prohibition of imports would permanently increase the amount of specie in this country, in its practical effects, would ultimately destroy all commerce, and in my judgment, it is wholly based upon the false premises that we can sell every thing and buy nothing. I grant that when any nation buys a large amount more than they sell, that the coin must be exported to liqudate the debt; but the next year's purchase of the debtor nation will undoubtedly be enough less than the former, to restore the equalibrium of the commercial world, which can be accomplished in no other way than by a return of the specie to that nation where there is a deficiency and the greatest demand. There it will assuredly find its way, because, like every other article of commerce, it must go where it commands the highest price.

But suppose that we levy an additional duty of 20 per cent. on all articles which we consider the absolute necessaries of life, the result would be an increase of price in our market. Cannot the British manufacturer sell to some extent as before at the same profit, by merely paying into our Custom House the additional 20 per cent. tariff, and reimburse himself by being enabled to sell his goods at the advance price? Another reason urged, is that England and other countries will not admit our bread stuffs without paying enormous duties, and that if we were to retaliate, it would of necessity compel them to come to terms of reciprosity. This I believe is the natural feeling of all. It has been the last and most difficult point for me to relinquish, for I was once in favor of a Protective Tariff and a credit currency. I still hold myself open to conviction, and if I can be convinced that my present views are incorrect, I am ready to relinquish them, believing that I am not one of those who if "convinced against his will is of the same opinion still."

If I mistake not, we have tried the retaliating system once, and I would ask what evidence is there, that we shall be more likely to succeed upon a second trial; and is not the tendency of public opinion in the old world altogether in favor of free trade principles; are not all parties in England scheming peaceably to get rid of the system, on account that the mass of the people can no longer sustain life under its oppressive burden?

Do not the starving millions attribute our prosperity to the practice of Free Trade by our Government? Shall we disappoint them by our example and deprive them of every hope? Shall we return to a system of taxation that is the cause of the premature death of 20,000 human beings annually? and that too on one small island of our own kindred blood?

But admit for argument that the retaliating system would bring England to our terms of reciprosity, what would be the effect upon the price of Bread stuffs? would the price here materially advance? would we not then come in competition with wheat from the Baltic, from Russia, Germany, Poland, and all other grain growing countries, and that too where labor is cheaper than with us, and even less than it is in England? How can we then compete with either of those Nations in a foreign market, under any system of high prices?

I take the position that American labor must absolutely come in competition with that of Europe, unless we adopt the Chinese policy, and destroy all commerce and live entirely within ourselves, (a system wholly impracticable to adopt in this enlightened age).

What are we to understand by commerce; is it not an intercourse of trade and an exchange of products or manufactures between the several nations of the Globe? and how can we exchange our products and manufactures for dye stuffs, hides, or West India goods, with Spain, Mexico, or the South American States, without meeting England and all other commercial nations in competition for the same trade? And how can we exchange products with Russia, France of

Germany, but what we meet England there in competition for the same trade.

If we go to Africa, we there find them, or to the "uttermost parts of the earth, they are there also." If we levy a duty to protect our own manufactures, the prices are raised in our own market, (as I think I have clearly shown) they can then compete with us, and if we prohibit them altogether they will smuggle their good among us, and if they dare, they would fight us into the bargain, as they have China, if we detected them in the act.

I confess that at the first view it appears inconsistent that we should admit the products of England on better terms than they admit ours; but shall we injure ourselves in order to retaliate against them? Shall we, because England oppresses the bulk of her population by excessive taxes on their bread, make the majority of our citizens pay excessive taxes on their manufactured goods? and is it a good and sufficient reason for so doing? I think not. Why is it that England takes the landed interest into such special favor by way of protection? It is because the monied men—the Lords and Nobles have monopolised all the land of the Kingdom, and they frame all the laws to advance their own interest and force their hard earnings from the mass of the people.

The English nation possess much greater natural advantages for manufacturing than for agriculture, on the account of a dense population and their limited territory at home, which is easily monopolized; consequently the mass of the people must necessarily be engaged in manufacturing. The law makers, therefore, in order to carry on their extensive wars and support a *splendid government*, have made the manufacturer bear the brunt of taxation, on the ground that these individuals, possessing natural advantages for producing wealth, can bear more taxation and *sustain* life, than individuals who do not possess those advantages.

Monroe, Mich., 1842. J. S. DUTTON.

Protective Tariff.--No. 4.

The Wool Growers, more than any class of farmers, seem to favor the Protective Policy. Do they think that an advance of 10 or 20 per cent. to the present duty on woolens, would ensure them for all time to come, the same increased ratio of prices? If they do, they are greatly mistaken. Do the manufacturers go for the same duty on the "raw material?" and if they did, competition at home would soon reduce the price of wool to the old standard, if not below it; and at present prices, I predict that Michigan will, in ten years from this time, turn out a greater surplus than any other state in the union does at present.

Wheat and Wool are to be the great staples of the state; we have done with producing pork, beef and coarse grain, at a loss of 50 or 75 per cent. on first cost, as at present prices.

While on this subject, I would ask what is the cause of the present low prices of those articles, if it is not on account of over-production, or too great a surplus and no foreign market, at a price that will pay us the first cost. Now suppose that the tariff is increased on wool as well as woolen, the prices of wool would be raised, and all the farmers in the Union turn their attention (as they undoubtedly would) to the production of that article, how long would it be before the market would be glutted, (the same as with pork at present)? Would not prices then be brought back again, if perhaps not below the present standard? Would you not then have just cause to call on Government for an additional Tariff; more especially as they had stimulated you to invest your whole capital in the production of that article, at high prices, and would they not be bound again to throw around you the mantle of protection, by way of a bounty or otherwise to be again followed by over production, fall of prices, and then an other call for increase of protection?

I have been told that the manufacturers purchase wool in a foreign market say at 24 cents per pound, and then fill it with 2 lbs. of sand to one of wool, or saturate it with some substance which costs nothing and is easily separated or cleansed, until it brings the first cost of the wool down to 8 cents per pound, or below, and then it is to be admitted into our country free of duty. On its arrival here they open the bales and shake out the sand, or cleanse it in some other, and they then have a fine article free of duty, worth 50 cents per pound in our market.

I do not pretend positively to vouch for the truth of the charge, although to me it seems not improbable.

But the cry is, give us high prices or we perish. This I admit is a debatable question, and one that ought to be well understood by the great mass of producers; but to my mind, a system of high prices is unfavorable to the prosperity of this great nation.

I wish to be understood, so here I assert, that a general system of low prices is better for the laborer, the farmer, the mechanic, and manufacturer, (that is, that an absolute specie standard is better than a fictitious paper credit,) and that it is better that improved farms should be worth twenty dollars per acre, and labor ten dollars per month, and wheat six or seven shillings per bushel, and manufactured goods and every thing else in proportion; than it is to have all things twice or three times higher, because at the low scale of prices we might export a surplus to foreign countries, and at the higher rates, foreign countries would undersell us.

In short, special legislation of any kind, that has a tendency to raise up prices and establish a fictitious value upon property, whether by a protective tariff as a general policy, or a credit currency or any other monopoly, fraud or fiction, is decidedly injurious to the productive classes, and the best interests of this country. I am satisfied that the tendency of this nation is to purchase all the goods we are able to pay for under any circumstances, and when we imagine ourselves wealthy from either of the above causes, we purchase more goods than we are able to pay for, and instead of getting rich, we become miserably poor by the operation.

The high priced, high tariff advocates will now ask; would you reduce us to the condition of the Russian serf, or the English weaver, and in what is our condition better than theirs, unless we obtain higher prices for labor than they do?

I answer that labor is best paid when it will obtain the greatest amount of the necessaries or luxuries of life for a given service performed; that it is the relative and not the nominal prices of labor and necessaries that determines when labor receives a just reward; and you cannot reduce the producers of America to the condition of the operatives of Manchester and Birmingham, until our Government, under the specious pretence of "protecting our industry," taxes us enormously, by way of a Tariff, on all the imports we eat, drink or wear, and allows a bounty on a portion of our exports to some favored class; taxes us for the glass in our windows, and for every thing under Heaven, and then in addition, takes one tenth of all the products for the support of one established church.

In short, when our Government adopts the whole system of Brittish "protection," of which ours is a faithful copy, all except the "sliding scale," then and not till then, will the producers of America be brought to the same condition of the producers of England, the operatives of Manchester and Birmingham, and then we may perhaps boast of a splendid government and sing America "rules the waves," and dictate to the nations of the earth, with death and starvation staring us in the face to the extent of 20 thousand human beings annually. J. S. DUTTON.

Monroe, Mich., 1842.

AGRICULTURE OF ONTARIO COUNTY.

The present condition of agriculture in this county generally, as well as in this immediate portion of it, may be called good. The soil of Ontario is rich, but in different sections it presents every variety of loamy, clayey, sandy, and the various degrees of admixture of these.

The aspect of the country is agreeably undulating and picturesque. The principal product of the county, since its first settlement, has been wheat. The coarser grains are cultivated, but mostly for domestic consumption.

Wool has become within twenty years, an important product of our farms. The town of Richmond had, at the recent census, about 28,000 sheep, chiefly Merino and Saxon, and these mixed upon the common stock. Some, but not much attention has been paid to the Bakewell, South Down and larger breeds of English sheep. Our sheep husbandry would doubtless be improved by increased attention to root culture, beets, ruta baga, &c. Our wheat is sold to the merchant millers of the neighborhood, whence the flour is mostly sent, by the way of the Erie canal to New York and Boston. A portion of it, however, finds its way to the Canada market.

Our wool is generally sold at home, to purchasers for the eastern manufacturers.

Of cattle for milkers and beef, the short horned Durham is the favorite breed. For working oxen, the Devonshire is still the best. Of swine, the Berkshire is, at present, the favorite. Much pork, since the temperance cause has been in the ascendant, has been fattened on apples. For a number of years, I have fed my hogs but about a fortnight on Indian corn, after taking them from the orchard; and have thus made excellent and profitable pork. Good horses are raised in this county; but the present race are an admixture of almost all varieties of breeds.

The different oaks, hickories, black walnut, butternut, elms, maples and beech are the prevalent timber of this neighborhood.

The value of farms may be said to range from $35 to $50 the acre, according to the situation, quality of soil, buildings, &c. &c. Occasionally, farms are sold at higher prices.

Clover, timothy and redtop, are the grasses most cultivated and most profitable for pastures and meadows.

To the question—"what agricultural changes are requisite to advance the prosperity of the country?" It may be answered, the extended introduction of the silk culture would probably be one of those changes.

Our farmers are industrious, enterprising and tractable: ready to adopt, and give fair trial to any improvement in the science of agriculture, to test new implements and machinery, and need nothing to advance their prosperity, but wholesome and steady laws of protection to American industry.

[*Trans. N. Y. State Ag. Soc.*

Rust in Wheat.

We extract the following from the American Farmer of recent date. It certainly deserves attention, and we commend it to the consideration of intelligent and observing persons. The advice in regard to early cutting is to be received with some caution. We approve of early cutting, but in one case we know that we cut too early; and therefore feel that this danger is to be guarded against. We remarked on the error committed by many farmers in this matter in our last number.—ED.

Hence, then, we infer, that *plethora*, or over fulness in the supply of sap, (arising either out of the peculiarly favorable condition of the atmosphere, whose phenomena we have described, or an over rich soil) is the cause of the disease, and in this we are borne out by two eminent agriculturists, whose essays we have

already published, but shall here extract a sentence or two from each, by way of strengthening our position:

Wm. M. Peyton, Esq., after enumerating several assigned causes, says:

"But if on the contrary, it results from *Plethora*, induced by excessive vegetation, then I am fearful it is an evil beyond remedy."

"That the last is the *true character* of the disease I am convinced, though I express the opinion with some diffidence, as I know it is opposed to the views of many agricultural writers of distinguished reputation.

* * * * * * *

"I have heretofore supposed that the exudation proceeded from the bursting of the minute surface vessels, whose rupture not being visible to the naked eye, had discredited the theory which taught the existence of what could not be seen. But in a conversation a few days since with a sensible and observing farmer of a neighboring county, he told me that the ruptures were distinctly visible, when the rust was removed with care. On the same day he illustrated the correctness of his statement by producing several stalks of rusted wheat, upon which longitudinal ruptures were very distinct under every blotch of rust examined.

C. G. Green, Esq., the President of the New Jersey Agricultural Society, in his late report, gives the following cases, tending to the same point as the one given above:

"One of our farmers had an extraordinary piece of wheat, which he thought out of danger, it was so nearly ripe. On a very hot day, between the hours of one and three o'clock, there came a small cloud over, which completely drenched the field of wheat. A deathlike stillness succeeded; the cloud passed away; the sun shone extensively hot. The owner in this state of the case, went to examine the wheat, as it was much pressed down by the shower; he immediately observed a continual ticking, or snapping noise in every direction in the wheat. The straw was fine and bright, but upon examination he perceived it bursting in short slits of a fourth of an inch long, and the sap exuding in thousands of places. A day or two after, the whole field was darkened with rust and the wheat of little value. It does not appear that these circumstances take place while the wheat is growing, but only at the critical state of ripening.

On my neighbor White's farm some years since, was one of the heaviest pieces of wheat straw I ever saw, remarkably fine, and nearly ripe. I had also a good piece advancing fast to maturity; on a close warm morning, a small cloud of fog arose from the meadow and gradually covered the two fields, but was not a general fog; being very still, it remained hovering over the fields until the hot sun dissipated the vapor. Being acquainted with the above case, I was alarmed for the wheat and watched over it with deep interest. When the sun had somewhat dried the straw, and warmed it, the straw began to burst with a continual ticking noise, the sap exuding at all these little splits. In a day or two the fields were black with rust expept some small spots, which are worthy of notice. An acre or two of mine was so nearly ripe that the wheat was tolerably good, and the rust on the spot of a reddish brown. In Mr. White's field there were some trees which kept the intense heat of the sun from the straw; there was tolerable wheat, also. The rest of the fields would scarcely pay for gathering and thrashing.

A question of importance arose in those two cases. Was this injury a fungus, the very fine seeds of which float about and attach themselves to the straw, as some of our learned agricultural writers tell us, or is it the sap of the straw that ran out and was dried on the straw, and was reddish or black according to its state of ripeness or fulness of sap?

Your committee are decidedly of the opinion that the sap being lost at this critical time of ripening is the true cause of the shrinking of the grain."

It must, we think, strike the reader very obviously, that the *rust* is not occasioned by parasitical plants, or fungus; that if the discolored matter on the external surface of the wheat plants be, or present the appearance of, parasitical plants, that it is produced by the rupture of the overcharged vessels of the plants, and is in fact oxydized sap which had thus escaped and formed a species of paste or jelly on the outside. We do not pretend to deny that in the interval between the exudation and the drying of the sap, that living fungus bodies had not taken up their abode therein, for such is one of the consequences of putrefaction—it is suffi ient for us, to endeavor to show that the bursting of the vessels of the wheat plant, is the cause of the rust.

It may now be asked, are there any preventive means to be used? We answer that we think there are—and among them these:

1. *Deep Ploughing.* By this, the roots will be permitted to extend themselves so deep as to be without the immediate range of sudden atmospheric action—all fermentable manure, applied to previous crops, will also be deposited too deep to do harm from similar causes.

2. Application of saline manures, as lime, marl, plaster, salt, &c., and the avoidance of all use of any strong manures, which are liable to active fermentation.

3. Any soil whereon wheat is grown—if not naturally dry, to be made so by draining.

4. Increased quantity of seed to be sown.

5. Earlier sowing, so as to enable the wheat to ripen at least two weeks earlier than at present, and thus avoid the evil effects of the unfavorable weather which prevails at the particular period on which its ripening is now thrown.

6. Sowing an earlier variety of wheat, with the objects above stated in view.

7. Rolling the ground immediately after ploughing in the seed in the fall, and again in the spring.

Thus far of preventive means, now a word or two about remedial ones, should the above fail to keep off the rust.

If after using the precautionary means recommended above, your wheat should become rusted, cut it as soon as the grains may be thoroughly formed; never mind if they should be still in the milk, they will get nourishment enough from the stalk to ripen them. By cutting before the straw is literally destroyed, you not only save the straw, but will get more grain, and better flour than if you wait for it to mature standing in the field on rusted stalks.

SOILS.

We extract the following simple account of soils from a recent Farmers' Journal, Eng.

Mr. W. M. Chatterley delivered his eleventh lecture at Havering Bower, near Rumford, on Monday, October 3d, on SOILS.

Soils may readily be supposed to partake of the geological character of the formation on which they rest, and such in truth is the case. The time to which the present lectures were limited would not permit the subject of geology, even the geology of Britain, to be discussed; it would, therefore, be sufficient for the purpose to state that the three most generally diffused minerals, viz., *clay*, *limestone* and *sand*, were all necessary constituents of a fertile soil, but that the proportions in which they occurred in different soils varied, and that too in accordance with the geological character of the subsoil. As either *clay*, *lime* or *sand* was the predominant ingredient, soils were classified accordingly into aluminous, calcareous or siliceous soils. Either of these earths alone form a barren soil; and, as each may be in greater proportion, it imparts to the soil its peculiar character; stiffness, attraction and retention of moisture, hardening into a brick-like consistence, and cracking during dry weather, the characteristics of soils on the clay; great friability, speedy filtration of water, and general dryness, are the opposite characteristics of sandy soils, plainly indicating their mutual admixture as a means of remedying some of the defects of either; the rubbly or marly character of calcareous soils, allows of speedy filtration, and causes too great dryness, indicating the benefits to be derived from the addition of either clay or sand. An excess of sand is much less injurious than an excess of clay: indeed, all the most fertile soils contain a larger proportion of sand than any other mineral ingredient. The different natural mixtures of these earths have given rise to the different terms by which peculiar soils are distinguished, as *loams* where clay and sand form the chief constituents, or *marls*, where clay and limestones most abound. The purest clay soils, however, do not contain less than 60 per cent. of silica, while many siliceous soils contain from 90 to 95 per cent of sand.

Vegetable matter in soils is also necessary to their fertility; and the varying quantity of this material, from about 10, as in garden mould, to 70 per cent., as in peats, gives to these soils the characteristic whence they derive their names.

But, as has been said before, neither the purer forms of clay, sand, or limestone alone form fertile soils, but the contrary; so it is to a *proper* admixture of these that we must look for the fittest condition of a soil. It generally happens most happily that sand, clay, or lime are found within reach of one another, and ready to be used mutually for the amelioration of the soils, in which they hurtfully predominate; and it should be remembered that such amendment *is* permanent.

The other constituents of fertile soils are various; but, in order that they should retain their fertility, they must constantly contain the alkalies, potash and soda, and the alkaline earth magnesia, with the sulphuric, muriatic, and phosphoric acids, the peroxide of iron and manganese—these substances serving as the food of plants, while the sand, clay, and limestone form the body of the soil, amongst the particles of which the roots penetrate, and support the plants by their mechanical action.

The chemical properties, however, of the three chief constituents of soils should be attentively considered also, as tending to elucidate many anomalous instances of unproductiveness in particular soils. The attraction of clay for water renders it highly useful in siliceous soils, which have no such property: its adhesiveness tends to bind together the loose falling particles of the sand; while these very properties, when in excess, tend to render the soil unfruitful, and are then to be remedied by mixture with sand or lime, to increase the friability and filtration, and thus, in either case, to permit the passage of air and water amongst the particles of the soil in such a manner as to preserve a due but not excessive degree of moisture in the soil, so that it is neither retained too long, nor removed too soon. These three, the chief constituents of the soil, though they may either of them be requisite in a slight degree as the food of plants, are not to be considered in this light merely, but rather as having for their chief use the mechanical duty of affording support for the roots of crops.

The state of chemical combination, in which the various ingredients of the soil are found, also materially influences its fertility, though such combination should differ somewhat for particular crops; for instance, wheat requires that a portion of silica should be in union with potash, and for clover, that sulphur should exist in the soil in the condition of a soluble sulphate; should the soil, however, contain sulphate of the protoxide of iron, as is the case sometimes in the London clay and in peat soils, it is altogether injurious, and should immediately be converted into peroxide by exposure to the atmosphere, by frequent and deep ploughing, harrowing, and disintegrating.

Much practical matter, as to the mechanical action of the various farming operations, and on the chemical constituents of soils, was added, but it is to the chemist that the farmer must apply for a knowledge of the minor, but still, deficiences of his soil, and for the easiest and cheapest mode of remedying them. There was no reason why a farmer should not be acquainted with chemistry; but if not so himself, there were many of the latter class who now were turning their attention to agriculture as connected with the science, and with whom there would be no difficulty for the farmer to put himself in communication.

The proportions of the chief constituents of soil, best suited for all crops, were then shown to be from 50 to 70 per cent. of silica, from 20 to 40 of alumina, and from 10 to 20 of calcareous matter.

The mode of arriving at a proximate determination of the relative qualities of each of them was then shown. The quantity of *moisture* was found by drying a given weight in an oven, and finding the loss of weight; the quantity of *vegetable matter*, by heating a given weight of the dried soil to redness, and estimating the loss; the quantity of *soluble salts*, by washing a given weight with water, filtering and evaporating the filtered liquor to dryness; the quantity of *carbonic acid*, by throwing a given weight of dry soil into a given weight of diluted hydrochloric acid, and estimating the loss of weight after effervescence had ceased; the quantity of *lime*, by filtering the solution in hydrochloric acid thus made, and precipitating by oxalate of ammonia; the quantities of *clay* and *sand*, by repeatedly washing a given weight of the soil with water, and pouring off after allowing it to settle for a minute or two until the two were entirely separated, then drying and weighing each.

TOBACCO.—So sensible is every brute creature of the poisonous and deleterious quality of this plant, that not one of all the various tribes of beasts, birds, or reptiles, has ever been known to taste of it. It has been reserved to man alone to make of this poisonous plant an article of daily necessity for the gratification of his depraved appetite.—*The Mirror.*

Sound and Light.—Sir John Herschell says that thunder can scarcely be heard more than 20 or 30 miles from the flash, but that lightning may be seen at a distance of 200 miles.

From the Transactions of the New York State Agricultural Society.

AGRICULTURE OF MADISON COUNTY.

Madison county embraces fourteen towns, and contains 582 square miles, or 327,000 acres of land, and 40,032 inhabitants.

The surface of this county is much diversified. The elevated ridge which separates the waters of the northern lakes from those of the Susquehannah river, passing through the southern part, renders it, with the middle, more or less hilly and uneven. These hills, however, are not so steep as to be unfit for cultivation, and the valleys are extensive and very fertile. The northern section of the county is generally more level.

The county is well watered by streams in almost every part, and in the northern towns of Sullivan and Lenox large masses of gypsum and water limestone, with some iron ore, are found. Common limestone is scattered in abundance over all the middle and northern towns.

The Erie canal and the Utica and Syracuse railroad pass through the upper, and the Chenango canal intersects the lower part of the county, affording free outlets for all her products.

Soil.—The fertility of the soil is very great; indeed it is supposed, in that particular, to be surpassed by but few counties of the State; and there is but little land within its boundaries that is not well adapted to cultivation.

The northern parts are mostly of a limestone soil, except the low bottoms, which are sandy, and the middle and southern sections may be designated as of a clay loam, based upon shale, or slate rock. It is a fact worthy of remark, that this county seldom suffers from want of rain.

Productions.—The northern part of the county being generally level, is admirably adapted to the growth of wheat and corn.

The centre and more elevated parts produce large quantities of wheat, barley, oats, corn and hops, and the southern parts grow hops, barley, corn, oats and potatoes, in which latter crop they excel the other parts of the county, both in quantity and quality.

The soil is almost every where natural for grass, the crops averaging from one and a half to two tons per acre, of a superior quality, mostly upland. And this, with but a small outlay, might be easily increased to from 2½ to 3 tons.

The wheat lands, under good management, give from 20 to 28 bushels per acre; barley 35 to 50; and oats from 40 to 70 bushels; in some cases coming up even to 100 bushels per acre. Large quantities of peas are also grown.

The production will appear more accurately by reference to the returns of the census of 1840, in which year Madison county was shown to have raised

200,242	bushels of	wheat.
135,625	do	barley.
343,207	do	oats.
171,204	do	corn.
676,649	do	potatoes.
370,024	pounds of	wool.
117,270	do	hops.
215,619	do	sugar.
65,749	tons	hay.

Butter and cheese to the amount of $193,670.

Which, together, at the low prices of 1840, yield the amount of $1,389,345.

Markets.—The farmers of this county usually find a market for their produce with the merchants of the villages, who in turn send it to the city of New York. The cattle fattened for market are driven to Albany and New York city; and those for grazing are sent to Philadelphia, and the farms along the North river.

Cultivation.—Attention to agriculture has been gradually increasing in this county; there is, however, yet much room for improvement. But little importance is attached to regular systems or rotation of crops. Wheat is raised after summer fallow with two or three ploughings, and the same crops are frequently allowed to succeed each other.

The manure from stables is put generally upon the land, and plaster is also applied to winter grain and grass; but as yet very little value is attached to manure, and no methods are taken to increase it. Lime is seldom employed, although it is admirably adapted to the soil, and composts are unknown. There appears, however, to be a general awakening to the importance of the subject.

Draining, particularly that under ground, has been partially attempted, but not to any extent, though the soil in many parts would be much improved thereby.

Of grass seeds, clover, timothy and redtop are used, the latter on interval lands liable to be flowed. Clover is seldom sowed alone, being usually mixed with timothy.

Top dressing grass lands is occasionally practised, and with great benefit.

The profitable practice of cutting or chopping straw for feeding stock may be said to be hardly known. Straw is generally stacked out, and cattle allowed to take what they want of it. It is also used for littering horses, but there are instances where it is hauled away from the buildings and burnt to get rid of it!

The cast iron plough of various constructions, with cultivators, harrows of different kinds, horse rakes, rollers, &c. &c., are in use, but few of the new improvements in agricultural implements are found here, unless perhaps occasionally a sowing machine.

Animals.—The horses of this county are very good, strong, of good size, well made and admirably adapted to all farming purposes; but they cannot be designated as of any particular strain of blood.

The breed of neat cattle is also excellent; cows on fresh summer feed, giving, in some instances, 25 quarts of milk per diem, and generally from 15 to 20. Blooded cattle have not been introduced to any extent as yet. This county, however, at the late fair of the State Agricultural Society at Syracuse, was among the successful competitors for premiums in that line. Drovers from the east say that they find about the best of cattle in this county and neighborhood.

In swine but little pains have been taken. The pork of this county is, however, very good, and in many instances Berkshires have been successfully crossed with the (so called) native breed.

The sheep of the county are generally Merino and Saxony. Formerly large flocks of full blooded animals of these breeds were found throughout the county, but now they are more mixed; attention not having been paid to keeping them separate.

Except by some few of the best farmers, no pains are taken to shelter sheep in winter. They are kept usually in flocks of from 70 to 100, and from 300 to 1000 on a farm. The southern part of the county has been much afflicted with the rot or "foot ail," which breaking out in large flocks where the same attention could not be given as to smaller ones, did much damage. It is however, now rather diminishing. As to the cause, farmers here, as elsewhere, do not agree, each one having a theory of his own.

By the census before referred to, it appears there were in the county in 1840,

9,358	horses and mules.
42,191	neat cattle.
186,616	sheep.
30,657	swine.

Value of Land.—Land in this county may be said to rise in value from $10 to $100 per acre, generally averaging from $20 to $50; and the size of farms to range from 50 to 600 acres; for the most part comprising from 100 to 150 acres each.

Timber.—The prevailing timber of the northern part of the county is maple, beech, oak and pine; and of the middle and southern sections, maple, beech, hemlock and bass. There is, however, throughout, a great variety, comprising walnut or hickory, ash, birch, elm, spruce, white cedar, chestnut, fir, butternut, poplar, balsam, whitewood and sycamore.

In conclusion: with regard to the "changes necessary to advance the agricultural prosperity of the county," it may be said, that the general diffusion of agricultural intelligence and disposition to seek for and take advantage of the improvements adopted by others, is all that is wanting to place this county in the rank which the bounty of nature has intended it to assume.

For this purpose no better means can be devised than attention to the different agricultural periodicals now published; which from the extreme low price of subscription, are available to every farmer however small his means. The Genesee Farmer or the Cultivator should be in the hands of every one. These contain the results of the experience of our neighbors, and affording the means for the general interchange of ideas, cannot be too highly prized.

The Agricultural Society of the county, also, which has been but lately established, will, it is hoped, do much towards its advancement.

We add a second account of the Agriculture of Madison County from an experienced hand.

The county of Madison contains a diversity of soils, and may be said to vary much in its climate; as the northerly part, between the Erie canal and the Oneida lake, is in general only between 350 and 400 feet above the level of the tide waters, while the central and southerly, and southwesterly parts rise in ranges of hills to the height of from 1600 to 1800 feet above the level of tide waters. There is always a marked difference in the time of the ripening of grains and the general maturing of crops between the lower and more elevated parts of the county—always being earlier in the northern and lowest part. The lands from the Oneida lake south to the Erie canal are level, the lake being only about 45 feet lower than the long or Utica level of the canal, and are generally a rich alluvial soil, some districts of which are well adapted to the culture of the different kinds of grains, and all, or most of it, is considered a great grass growing district. Immediately south of the Erie canal, generally the land commences to rise until it terminates in the elevations before mentioned. A belt of land south of the Erie canal for some distance as it lies in the vicinity of the lime and gypsum formations, passing through the towns of Sullivan, Lenox and Stockbridge, is undoubtedly the best wheat district in the county, and also excellent for all other grain crops. There is another district of land, different from the lands of the county generally, and may be termed table land, and is of a general elevation of 800 feet above the Erie canal at Utica. This section of land commences in the east and northeasterly part of the town of Madison, passing west and south-westerly quite through the town into the easterly part of the town of Eaton; thence more southerly through the west and southwest part of Madison, east and southeast parts of Eaton, west part of Hamilton and east part of Lebanon, to the south line of the county, and passes into the county of Chenango from Hamilton, forming the northern entrance of the Chenango valley. All of this district of land (or principally) is a very deep and porous loam and gravel soil; some parts sandy loam and gravel, and is a strong and fertile soil, and is peculiarly adapted to Indian corn, which has

matured on this land in the most unfavorable seasons. This district of land is also adapted to every other of the straw grains cultivated in our country, and invariably produces heavy crops, and is a natural grain growing district. Most of the town of Cazenovia is also adapted to the culture of grain.

There is in fact but little of the highest lands in the county but what produce good crops of spring wheat, barley and oats, and Indian corn matures on it in favorable seasons. Barley is shipped to the Albany market to some extent, but the surplus grain generally finds a market at the extensive distilleries in this and the adjacent county of Oneida. This county is susceptible of producing an amount of grain for export vastly larger than it does. Notwithstanding, as a whole, it is a better grazing than a grain growing county. It is probable that there will always be sufficient of the grains produced in the county for home consumption, and a considerable surplus for market, and particularly of the coarse grains. When the county was new, winter wheat was raised in abundance, even on the hill land, and on the first summer fallowing of pasture lands, heavy crops of winter wheat were produced, and were not hove out by frost. No one then doubted but that it would always be a wheat country, and to a considerable extent it might still be, but for the action of the frost on the hill lands, heaving out the roots of winter wheat. There is but little hill land that has been pastured a few years and then summer fallowed, but has strength of soil sufficient to produce a heavy crop of winter wheat, and have it fill well when the action of the frost is prevented, which has been sufficiently proved; but spring wheat on the hill lands generally is cultivated, on account of the precariousness of winter wheat: and the variety which obtains most favor is the Italian.

It has been abundantly proved, that spring wheat, barley, and oats, can be advantageously produced on our uplands, on greensward turned over. But as a whole, the true interest and most permanent wealth of the inhabitants of the county, lies in the cultivation of the grasses, on which the greater portion of the farmers of many sections of the county, have for many years bestowed their chief attention, and in rearing neat stock for store cattle, fattening, and for the dairy, and numerous flocks of fine wooled, and other grades of sheep; which has been a lucrative business, having made many farmers wealthy, and all those in a thriving condition. The soil of the hill lands of the county, differs much from the table lands and the valleys, being generally free from gravel, and is generally composed of a rich loam and vegetable matter. The loam, in many places, is of a dark or chocolate color, in other places of a lighter color, inclining to yellow.

The native growth of timber is maple, beech, white ash, white and red elm, butternut, cherry, some birch, in many places considerable hemlock, butternut hickory, and in the northern and northwestern parts of the county white and black oak, and hickory: and in swamps, white pine, cedar, and black ash. There are some upland pine lands, but they are not extensive, and the timber has principally been converted into buildings. The neat stock of the county is mainly of the native breeds; there are not many Short Horn Durhams, though some. There is yearly a considerable number of neat cattle fattened for market. The principal article of food in fattening them, is the potatoe; but Indian meal, barley and oat meal, is also used as feed with the potatoe, and also oil-cake. Pork is also fattened extensively on potatoes boiled and mixed with barley, and oat-meal, peas, and some Indian corn is fed towards the close of the fattening, but is not extensively fed. Good and heavy pork is made by the above mode of feeding. Those who keep a dairy, fatten hogs on the refuse of the dairy.

The swine consists of various breeds and crosses, and are much improved since the first settlement of the county, and are still improving. Berkshires, and crosses from them, are becoming common, and are in high repute.

Of sheep the Merino and Saxony have prevailed, with every imaginable grade, by crosses on the native breeds.

As a root crop, potatoes prevail vastly over all others, and are extensively cultivated both for fattening domestic animals and for feeding store cattle; and are abundantly produced, or can be, on most soils in the county. The ruta baga has been cultivated by some, but has not obtained favor with the farmers generally. Carrots are cultivated to a limited extent by some and fed to milch cows and other stock, and are held in high repute. Hops have been extensively cultivated from an early day in this county, and yet continue to be, which has been a source of considerable wealth to those engaged in that culture.

The ploughs in use are the cast iron, of various patterns, no one prevailing exclusively. Double or hinge harrows, are much used of late years, and are considered a great improvement in that article. Cultivators of several models are used among corn, and are considered an improvement by many, over ploughing among it, at the time of hoeing.

Of grasses for meadow, timothy or herds grass, is mostly cultivated, clover mixed with it to some extent. On wet or swampy lands, red top or foul meadow. The principal grasses cultivated in the county for meadow and pasture, are red and white clover, herds grass or timothy, red top and foul meadow. Spear or June grass, grows spontaneously without cultivation. Some orchard grass or *Dactylis glomerata*, is cultivated by some, and produces an excellent hay, and an abundant growth of feed for pasture, and for that purpose is most valuable, starting earlier in the spring, and after being mowed or fed off, enduring the drought better, and yielding feed later in the fall than any other, and its roots never winter killing, and is easily subdued. Its culture should be extended, and particularly for pasturage. The greater part of the county being hilly with numerous valleys of rich land, the hills abounding with springs, which water the valleys, peculiarly adapts it for a grazing and stock growing county; and all the best grain districts will also produce good meadows and pasturage. The fat cattle and sheep, pork, butter, cheese and lard, are principally sent to, or purchased for the New York market.

Store cattle and swine are either sent to, or purchased for the different eastern markets. The aggregate annual value of grain, store and fat cattle, pork, lard, and store swine, store sheep and wool, hops, and the products of the dairy, that are sold at the different markets, I have not the statistics of before me, but which I think amounts to nearly $2,000,000.

Wool is one of the principal staples, some of which finds a market at the manufactories of this and the adjacent counties; but it is mostly purchased by wool staplers for the manufactories in the New England States.

In addition to farmyard manures, gypsum is used to a considerable extent as a fertilizer, particularly on pasture and meadow lands.

In regard to rotation of crops, the practice that most prevails, and particularly on the gravel table lands, is, to spread the stable and barn-yard manures on the greensward of pasture or meadow lands, carefully turn it under, pass over a roller, drag with a light harrow, and plant Indian corn. dress the crop with a cultivator, and hoe twice; and it is not uncommon to obtain a yield of from sixty to seventy bushels per acre. The succeeding spring this land is sown with barley, and usually produces a heavy crop; the stubble is then turned under and sown to winter wheat, and seeded to grass; the wheat yielding generally a heavy crop, and the land left in a better condition than before. The same rotation prevails to some extent on the up or hill lands, except sowing spring grain, generally after barley; the crop of winter wheat being more precarious on such land.

In regard to the culture of silk, a number have commenced the business on a small scale, and their experiments have generally been satisfactory, demonstrating that it can be made a lucrative employment for females, and the labor of children. In fact, there cannot be for females so lucrative a domestic employment, to those who wish to be industrious, as the culture of silk, and of manufacturing the raw material into sewing silk and various articles of dress, both for use and ornament, for which the ingenuity of the fair of our country are distinguished. But the males must furnish the plantation of mulberry trees.

The Morus Oregona, or Oregon Mulberry, was introduced into this place by me, some five years ago, or five years next spring. They prove to be hardier than any other kind or variety with which I am acquainted, and I have ten different kinds and varieties. My new plant has endured the rigors of our severe winters, without injury, where the Italian, or Morus alba, standing beside them, would be killed. both the branches and the main stem. I have them growing at an elevation of about 1300 feet above the level of the tide waters at Albany, and nearly 43° N. latitude, and flourish well. The leaf of this new plant is larger than the Multicaulis usually is, and is much thicker and more heavy, being a more fleshy leaf than any other of the mulberry species known to me, with but very little woody fibre in the leaf; and it contains much more milk juice, and less of water, than any kind known to me. I have fed the leaf of this new plant to silk worms, four seasons, and in all cases my worms did better, fed with this leaf; were more healthy, and made better cocoons, than those fed on the other kinds; and in all cases, produced a finer and more flexible filament, and of a richer and more brilliant lustre than I have ever seen on any silk other than this, either foreign or domestic: and the silk has been so pronounced, by hundreds of the best judges of the article. This tree will certainly be an acquisition to silk culturists, particularly in the northern States, as the culture of silk progresses, and the merits of this tree becomes known.

In regard to the value of lands, there is but little improved or partly improved, in the remotest situations but will sell for $20 per acre; and better lands, and more favorably situated, are valued from $25 to $35 per acre: while the best situations, of farms, both in regard to thoroughfares, soil and buildings, are valued at from $40 to $60 per acre. Farms have been sold as high as $60 per acre: but the average value of land in the county, I think, would not exceed $35 per acre.

The Names of Plants and Flowers.

It is proposed to substitute plain English for the dog latin terms at present applied to plants and flowers—an alteration which would, we think, be advantageous, and meet with general approval. Crabbe, whom nothing was too minute to escape, has admirably ridiculed this botanical pedantry:

"High-sounding words our worthy gardener gets,
And at his club to wondering swains repeats;
He there of Rhus and Rhododendron speaks,
And Allium calls his Onions and his Leeks.
Nor weeds are now; from whence arose the weed,
Scarce plants, fair herbs, and curious flowers proceed;
Where cuckoo-pints and Dandelions sprung,
(Gross names had they our plainer sires among,)
There Arums, there Leontodons we view,
And Artemisia grows where Wormwood grew."

Wayne County Agricultural Society.

From some strange circumstances, the following errors occurred in the account of this society in our last number, some of which wholly alter the meaning :—

For 'eight month' read October.

10th line, for 'difference' read deficiency.

43d line, for 'half-blood' read half-bloods.

52d line, for 'and' read are.

64th line, for 'in' read for.

Last line, for 'J. J. T.' read N. B.

PROSPECTUS.

The subscriber announced himself in the last number of the New Genesee Farmer as the sole proprietor and editor of this paper, after the first of January ensuing. He renews this announcement ; and asks the aid of his friends and the agricultural community in sustaining the paper as far as they can conscientiously render that aid ; and he will respectfully and gratefully acknowledge every such service.

The paper will be somewhat enlarged ; and if suitable encouragement is given, in all respects essentially improved. He has made arrangements to enlarge his correspondence extensively at home and abroad ; and pledges himself that no pains shall be spared to render the paper worthy of support in its matter and execution. He can promise no more than this.

The price of the paper will be one dollar in advance by the year. Six copies will be sent for every five dollars ; ten copies for eight dollars, and fifty copies for thirty-seven and a half dollars, paid in good current money. Gentlemen who have heretofore acted as agents are requested to continue their agency. Postmasters are universally found courteous enough to transmit names and subscription money free of expense. Other arrangements as soon as completed and the names of special agents will be announced in the December number. *It is earnestly requested that returns should be made early, that the number of copies to be printed may be ascertained.*—

The universal complaint is that the times are hard ; but the productions of the press, even in times infinitely harder than the present, were never half so cheap as now. The farmer now gets his political paper and two or three agricultural papers for less than what one respectable political paper or general magazine used to cost. The times must indeed be hard, when the farmer cannot afford the miserable pittance, which he may save in innumerable ways, required to obtain that information, which may increase his products a hundred fold ; to say nothing of the satisfaction and improvement to himself and family from knowing what others are about, and witnessing the general progress of knowledge and the arts. What the temperate farmer now saves year after year in the expense of spirituous liquor only for his haying, to say nothing of other expenses and losses connected with its use, to which he was formerly subjected, will pay five times over for his agricultural paper, and leave enough to buy eight or ten useful volumes besides for the winter reading of his wife and daughters. When we go into our farmers' houses and see their loaded tables and their comfortable and luxurious clothing and furniture, and hear them talk of hard times, we are constrained to ask ourselves, whether this is the English language which is spoken, for under what sky, in what country, and at what period, were men ever in a condition of more substantial comfort and independence. If they are but just to themselves and to their advantages, no change of times or of prices can seriously effect their prosperity.

In truth we see but one single circumstance, that should hinder every farmer in the country from subscribing at once for the Genesee Farmer ; and that is Millers' doctrine that the world is to come to an end next summer. But even Millers' disciples are very anxious to get subscribers at a dollar per head for the "Second Advent Journal" which is now published periodically in Boston, tho' we are quite at a loss to know what they are to do with the money, unless as the Romans believed, there is some ferriage to pay for themselves and other friends before they can get into the Elysian fields. But besides we have been informed by one of their Chief Priests that it is not settled that the prediction is certainly to be fulfilled in April, but probably some time in the course of the next year ; so that the farmers will stand a fair chance of getting for their dollar six or eight months good agricultural reading at any rate, besides the satisfaction and merit of contributing to the good cause of agriculture and of helping a poor Editor, who has borne the heat and toil of more than forty years in their service.

Farmers ! then we expect you to honor the noblest of all arts, by which you live ; and to give us a fair and public-spirited support ; and we promise to do our best to deserve it. "Do not muzzle the ox that treadeth out the corn." Do not be too impatient to get a crown in one hand before you let a dollar go out of the other. The welfare, character, and happiness of millions yet unborn may depend on the efforts we now make ; and your co-operation that those efforts may be successful. Let us early and late sow the precious seeds of knowledge, wisdom, and virtue and "the Lord of the Harvest will give the increase."

HENRY COLMAN.

Rochester, 1st Nov, 1842.

N. B. Mr. M. B. Bateham proposes to pass the winter in Ohio and the South Western States, and will act as Agent for this paper—we anticipate likewise the advantage and pleasure of his regular correspondence for the paper.

Mr. C. F. Crosman, of Rochester, is an authorized Agent for this paper. Mr. C. having taken the Seed Store in the Arcade, recently occupied by Mr. Bateham, designs to render the Establishment complete in all its departments. His skill in raising and managing seeds is well known, and his honor and integrity undoubted.

SEED WHEAT.

To the Editor of the West Briton :

Sir,—This being the principal agricultural subject of the present season, I am induced to submit to the more intelligent of your country readers, some observations upon it by the celebrated Sprengel, late professor of agriculture in Brunswick :—

The material point given by Sprengel is, that *'the best bread corn is not the best seed corn.* That we may increase the nutritious quality by the soil and the manure, but that for seed this highly nourishing corn is unsuitable.

"Seed corn," he says, "must contain the different ingredients in due proportions ; if any of them be deficient, or in excess, the plant will be proportionately imperfect. I have analysed many varieties of the best seed corn from different localities, and have found them correspond so completely in their proportions, both of organic and inorganic ingredients, that they would seem to have grown all on the same ground.

"Some soils are so happily constituted, as always to bear the best seed corn ; while others never produce corn that will grow again. By analysis, we find the first never very rich in humus or nitrogen ; but well supplied with lime, magnesia, potass, salt, phosphates, and sulphates The effect of sheep's dung further illustrates this. Corn, richly manured with that dung, contains gluten in large proportions, which in germination reacts so powerfully on the starch, as to overpass the convertion into sugar (the chief nourishment of the germ) and produce vinegar. The best seed corn must therefore contain *much starch* and *little gluten ;* thus the starch is gradually converted into sugar, and the germ properly nourished. But even then, unless it contains also the due proportion of phosphates, &c., mentioned above, the germination will be stunted or frustrated."

Now gluten is the nutritious part of corn ; it is that which makes the best bread, and the greatest quantity from a given weight of flour. Corn, therefore, containing much gluten, is deservedly preferred both by the miller and the baker. And this quality is artificially produced by manuring. Gluten is the nitrogenous part of corn, and the more nitrogenous our manure, the larger proportion of gluten, and the smaller of starch—the *better* the corn for *food*, and the *worse for seed*. Seed corn, it seems, should not be raised on very rich soil, that is, not too rich in organic matter ; and, be the seed what it may, the produce may be rendered as glutinous as we please by nitrogenous manures. (Something analagous has been observed respecting potatoes—the Scotch lowland farmer preferring his seed potatoes from the moors and highlands.)

How far this principal may apply to the different varieties of seed wheat, it is for the intelligent farmer to consider.

I am, Sir, &c.

October 9, 1842. J. PRIDEAUX.

M. B. BATEHAM respectfully informs his friends and customers, that he has disposed of his business, and is desirous of leaving this place soon for the benefit of his health ; he therefore earnestly solicits all who are indebted to him to make immediate payment, in order that he may be enabled to "Do unto others," &c.

The business of the Rochester Seed Store will be continued by C. F. Crosman whose experience in the business and facilities for growing Seed, entitles him to the confidence and patronage of the public.

M. B. BATEHAM.

☞ Mr. Henry Colman will continue the Genesee Farmer. Oct 1.

ROCHESTER SEED STORE AND SEED GARDEN.

NEW ARRANGEMENT—C F Crosman having purchased the entire business and effects of the Rochester Seed Store desires to inform the Agents and Customers, and all who may wish to patronise the establishment, that he is now bringing in from his large Seed Garden on *Monroe* street, a complete assortment of such seeds as are best raised in this climate, and he will import from the first seedsmen in Europe and elsewhere, such kinds as are better raised in other climates. And Seeds of doubtful vitality will be thoroughly tested by sowing, and none offered for sale but such as can be warranted genuine. The proprietor is fully confident that his long experience in the business of growing and vending Seeds, will enable him, with strict attention to conduct the business in a manner that will prove satisfactory to the public.

Rochester, Oct. 1. C. F CROSMAN.

JERSEY PEACH TREES.

10,000 Peach Trees of superior varieties from one of the first Nurseries in the United States. Some of the varieties are, Large Malacaton, Crawfords Early, Mignon Free Water, Early Yellow Alberge, &c, &c., favorite varieties in New York and Boston market ; The Large Malacaton has been grown in the neighborhood of New-York, measuring 12 inches in circumference. Crawford's Early has been grown the present season near Boston, Mass., measuring 11 inches in circumference—they are a so great bearers. All orders left at the Rochester Seed-Store, or at the Nursery of Joseph Beers Key Port, Monmouth co., N. J., or at the Nursery of W P. Smith, East Needham, Mass., will receive prompt attention.

A liberal credit given for large orders with good reference. ☞ Several thousand of these trees will be at Rochester about the 10th November. nov1

ROCHESTER PRICES CURRENT.

Corrected for the New Genesee Farmer, Nov 1.

WHEAT,	per bushel,	$	75 a	$	77
CORN,	"		38		40
OATS,	"		15		
BARLEY,	"		38		
RYE,	"		44		50
BEANS, White,	"		75		
POTATOES,	"		15		18
APPLES, Desert,	"		19		25
FLOUR, Superfine,	per bbl		3,75		
" Fine,	"		3,00		
SALT,	"		1,12½		
PORK, Mess,	"		8.00		8,50
" per 100 lbs			2,50		2,75
BEEF,	per 100 lbs		2,50		
POULTRY,	per lb		4		6
EGGS,	per dozen,		10		12½
BUTTER, Fresh	per pound		10		12½
" Firkin,	"		8		9
CHEESE,	"		5		6
LARD,	"		7		
TALLOW, Clear,	"		7		8
HIDES, Green	"		4		4½
PEARL ASHES,	100 lbs		5,00		5 50
POT,	"		4,75		5,00
WOOL,	pound,		20		25
HAY,	ton,		6,00		7,00
GRASS SEED,	bushel,		1,00		1,25
CLOVER SEED,	"		5,00		6.00

PRINTED FOR THE PROPRIETOR, M. B. BATEHAM,
By Henry O'Reilly and John I. Reilly,
Book and Job Printers, and Publishers of the "Rochester Evening Post" and "Western New-Yorker."